AUTHOR INDEX

A

Abdel-Wahab, M. F., 143
Abdullah, M., 310
Abel, B., 33, 37
Abeles, F., 165
Abelson, P. H., 204, 211
Åberg, B., 331, 342, 343, 344, 345, 348
Abisch, L., 232
Acs, G., 48
Adams, M. E., 211
Adams, P., 404, 408, 414, 415, 416, 427
Addicott, F. T., 403, 404, 410, 414, 420, 421, 422, 423, 430, 431, 432
Adrian, R. H., 380, 382, 388, 390, 391
Agardh, J. G., 309
Agarwala, S. C., 348
Agranoff, B. W., 241, 242
Ahmed, S., 118
Ahrne, I., 473
Aimi, R., 305
Akamine, E. K., 267, 268, 285
Akazawa, T., 457, 559, 568, 570
Aksenova, N. P., 178
Albaum, A. H., 455
Albers, M., 55
Albersheim, P., 319
Alberts, A. W., 229
Alberts, B. M., 60, 61
Albricht, W. A., 345
Alcorn, J. W. S., 119
Alcorn, S. M., 444
Alderton, G., 56
Aldrich, D. G., 100
Algranati, I. D., 311
Allen, E. H., 57, 64, 69
Allen, E. K., 109, 111, 112, 114, 115, 122
Allen, F. W., 266
Allen, M. B., 6, 19, 30, 33, 38, 39, 166, 167
Allen, O. N., 109, 111, 112, 114, 115, 117, 122
Allen, P. J., 185, 559, 562, 565
Allfrey, V. G., 48, 49
Allison, R. M., 142
Allison, W. S., 60
Allsopp, A., 502, 522, 523, 528
Almon, L., 113
Alston, R., 144
Amesz, J., 20
Amoz, S., 59
An, T. T., 144
Anchori, H., 446
Andersen, B., 354
Anderson, A. J., 119, 122
Anderson, D. R., 256
Anderson, I. C., 16
Andrew, C. S., 117
Andrews, P., 319
Andries, M., 316
Appleby, C. A., 114, 121
Appleman, W., 457
Applequist, J., 60
Appuhn, U., 479, 480, 481
Archbold, H. K., 303, 317
Ardaro, C., 31
Arens, P., 512
Arison, B. H., 35, 251
Ariyoushi, U., 310
Arnold, W., 14, 15, 19
Arnon, D. I., 4, 6, 7, 8, 10, 11, 12, 13, 20, 30, 151, 166, 167, 168
Aronoff, S., 134, 151
Aronson, A. I., 57, 58, 60, 61, 66
Arrigoni, O., 32, 206
Arthur, M., 17
Artman, M., 216
Artom, C., 238, 239
Arzichowskaja, E. V., 569
Asada, K., 304
Asahi, T., 206, 208, 209
Asakawa, S., 440, 441
Asbell, C. W., 100
Ashby, E., 368, 369
Ashby, W. C., 367
Ashcroft, R. T., 97
Ashikawa, J. K., 51
Ashton, W. M., 455
Ashwell, G., 338, 340
Aspinall, G. O., 320
Asselberg, S., 337
Asselineau, J., 548
Astrachan, L., 69
Atkinson, T. G., 560
Aubert, J. P., 5, 7, 213, 219
Audia, W. V., 502
Audus, L. J., 426, 445, 561
Avery, G. S., Jr., 278, 427
Avron, M., 30, 31
Axelrod, B., 151, 154, 155, 190, 256, 257, 305, 454
Ayers, A. D., 366

B

Baalsrud, K., 7
Baalsrud, K. S., 7
Bach, M. K., 120, 140
Bach, S. J., 131, 135, 136
Bacon, J. S. D., 316, 317
Badenhuizen, N. P., 312, 313, 314
Bailey, J. S., 93
Bain, J. A., 239
Bain, J. M., 285
Bakema, K., 121
Baker, E. P., 564
Baker, F. A., 139, 143
Baker, R. F., 50
Balassa, R., 116
Baldwin, I. L., 109, 110, 113, 115, 117, 122
Baliga, B. S., 213
Balks, R., 345
Ballance, P. E., 230, 233
Ballard, L. A. T., 439, 447, 449
Ballinger, W. E., 84
Ballio, A., 217
Ballou, C. E., 243
Balls, A. K., 256
Baltscheffsky, H., 30
Bandurski, R. S., 190, 207, 208, 209
Banks, W., 314
Baptiste, E. C. D., 303
Barber, D. A., 100, 351, 361, 363, 365
Barber, G. A., 32, 186, 188, 189, 230
Baret, R., 144
Barger, G., 144
Barker, H. A., 143
Barker, J., 180, 277, 281, 282, 344, 348
Barker, J. W., 372
Barker, S. A., 115
Barlow, H. W. B., 430
Barmenkov, Y. P., 231
Barnes, R. L., 132, 133, 135, 141, 145
Barrows, H. L., 87, 89, 92, 95, 96, 97
Bartak, H. G., 213
Bartels, H., 456
Barton, L. V., 493
Barton, T. C., 354, 358
Basford, R. E., 252
Basler, E., 46
Bass, L. N., 439, 444
Bassham, J. A., 4, 5, 32, 123, 132, 151, 153, 159, 161, 164, 165, 183
Batjer, L. P., 82, 84, 90, 91, 93, 94, 95
Bauer, L., 466, 507, 508, 509, 512, 513, 522, 524
Bauer, N., 120

Bauerovâ, J., 454
Bauke, H., 516
Bauman, A. J., 226
Bawden, F. C., 185, 570
Bayley, S. T., 46, 59, 323, 324
Bayliss, N. S., 121
Beadle, N. C. W., 367
Beakbane, A. B., 498
Beardsley, R. E., 554, 555
Beckman, R., 254
Beer, M., 63
Beers, R. F., 61
Beevers, H., 151, 154, 155, 171, 177, 179, 180, 236, 252, 253, 254, 450, 456
Behmer, M., 296
Behrens, M., 29, 188
Behrman, E. J., 129
Beijerinck, M. W., 3, 17
Belford, D. S., 323
Bell, E. A., 144
Bell, P. R., 509, 510, 511
Beloff-Chain, A., 308
Bendall, F., 20, 31
Bender, E., 554
Benedict, C. R., 155
Benesch, R., 201
Benesch, R. E., 201
Benitez, A., 473
Bennet-Clark, T. A., 353, 356, 357, 372, 373
Bennett, M. C., 396
Bensink, J., 474
Benson, A. A., 33, 155, 158, 159, 164, 165, 181, 240, 243, 244, 245, 246, 247, 248, 249, 257
Bentley, J. A., 428
Ben-Yehoshua, S. G., 285, 294
Berezniak, H., 146
Berg, A. M., 453
Berg, P., 46, 72, 231
Berge, T. O., 552
Berger, J., 427
Bergersen, F. J., 109, 112, 113, 114, 121, 122
Bergren, W. R., 427
Bernhard, K., 232, 234
Bernlohr, R. W., 282
Bernstein, L., 342, 363, 365, 366, 371
Beroza, M., 254
Bersin, T., 201, 202, 205
Beschel, R., 495
Bessey, O. A., 343
Best, J. B., 172
Bevilacqua, L. R., 454
Bezinger, E. N., 257
Bhaduri, S. N., 109
Bhagvat, K., 186
Bhan, K. C., 101
Biale, J. B., 265, 266, 267, 268, 270, 271, 272, 273, 275, 279, 280, 281, 282, 283, 284, 285, 286, 288, 289, 294
Biddulph, O., 94, 96
Biddulph, S., 94
Bieberdorf, F. W., 111, 112
Bieleski, R. L., 362
Biemann, K., 548
Biggs, R. H., 421, 422, 423, 424, 425, 431, 432
Bilinski, E., 240
Billingsley, H. D., 82, 84, 90, 94, 95
Birch-Anderson, A., 51
Bird, I. F., 304, 307, 312
Birdsong, B. A., 144
Bischof, M., 28
Bischoff, F., 53
Bishop, J., 64
Bishop, N. I., 31, 35, 251, 252
Bisset, K. A., 114, 115
Biswas, B. B., 46, 207
Bitancourt, A. A., 544, 545
Björnsson, I. P., 483
Black, L. M., 554
Black, M., 438, 439, 442, 443, 446, 449
Black, M. K., 215
Black, R., 367
Blackman, V. H., 509
Bladergroen, W., 163, 165
Blair, D. S., 497
Blakeslee, A. F., 493
Blatt, J., 31
Blinks, L. R., 17, 19, 391, 394, 395, 398
Blix, G., 247
Bloch, K., 229, 234, 235
Block, R. J., 216
Bloemendal, H., 64
Bloomfield, D. K., 234, 235
Blount, R. W., 389, 393, 394
Blow, D. M., 54
Blum, J. J., 173, 174
Blumenthal-Goldschmidt, S., 445, 447
Boatman, S. G., 450
Bocchi, A., 479
Bock, R. M., 53, 56, 60, 68, 69, 256
Boedtker, H., 60, 62
Bokachava, M. A., 456
Bollard, E. G., 129, 130, 132, 136, 138, 139, 140
Bolton, E. T., 47, 48, 204
Bond, G., 115, 117, 122, 123, 124, 133
Bone, D. H., 133
Bonhoeffer, F., 63
Bonner, J., 46, 47, 48, 49, 50, 51, 54, 56, 57, 58, 63, 145, 184, 190, 319, 352, 358, 360, 362, 366, 457, 544, 545, 554
Bonner, W. D., 171, 184, 190, 192, 559, 565
Bonner, W. D., Jr., 14
Bonnier, C., 115, 116, 120, 122
Bopp, M., 507, 520, 522, 523, 553
Borgstrom, G., 278
Borkenhagen, L. F., 238, 239
Borodin, J., 523
Borsook, H., 47, 51, 56, 57, 72
Borthwick, H. A., 437, 438, 439, 440, 441, 443, 448, 465, 466, 467, 469, 470, 473, 474, 480, 483, 524
Bosch, L., 64
Botjes, J. O., 266
Bottelier, H. P., 475
Böttger, I., 33
Bottini, E., 453
Boulanger, P., 144
Bould, C., 85, 101
Boulgalsora, Z. P., 342
Bouma, D., 104
Bourne, E. J., 310
Bouveng, H. O., 320
Boyer, P. D., 201
Boyle, P. V., 391
Boynton, D., 82, 91, 92, 99
Bové, J., 32, 50
Bowen, T. J., 51
Brachet, J., 33, 65, 72
Bradbeer, C., 225, 235, 236, 245, 252, 253, 450
Bradbeer, J. W., 165
Braddick, J., 498
Bradfield, J. R. G., 51
Bradford, G. R., 100
Bradley, D. F., 15
Bradley, G. A., 93
Bradley, R. M., 229, 241, 242
Brady, R. O., 226, 227, 229, 241, 242
Brakke, M. K., 554
Brandl, E., 217
Brassington, M., 455
Braun, A. C., 533-58; 514, 529, 533, 534, 535, 537, 540, 541, 542, 543, 544, 546, 549, 550, 552, 553, 554, 566
Braunstein, A. E., 129
Brawerman, G., 33, 454
Breckenridge, B., 176
Bregoff, H. M., 10, 11, 240
Bremer, J., 239
Brenchley, W. E., 112, 113
Brenner, M. W., 267, 268, 272
Brenner, S., 69, 71
Breslavets, L. B., 502
Breslow, E., 335, 336, 341
Bressau, G., 455
Brian, P. W., 444, 479, 480, 481
Brierley, J. K., 174

Briggs, G. E., 353, 357, 358, 360, 362, 368, 369, 371
Briggs, M. J., 112, 121
Bril, C., 20
Brin, G. P., 183, 256
Britten, R. J., 52, 66, 71, 204
Brochmann-Hanssen, E., 319
Brockwell, J., 111, 112, 119, 122
Brody, M., 35, 38, 39
Brody, S. S., 19, 38
Bronsignori, A., 156
Brooke, M. S., 143
Brookes, P., 256
Brouwer, R., 357, 361
Brown, A. D., 115
Brown, A. H., 165, 176, 181, 182
Brown, A. M., 311
Brown, A. P., 323, 342
Brown, D. D., 139
Brown, D. H., 311
Brown, E., 438, 439
Brown, G. W., 131
Brown, G. W., Jr., 146
Brown, H. S., 421, 422
Brown, J. C., 96, 99
Brown, J. G., 92
Brown, J. S., 33, 38
Brown, J. W., 421, 425
Brown, R., 46, 305
Brown, R. A., 60, 62
Brown, R. T., 96
Brown, S. A., 309
Brown, S. M., 82, 85, 89, 92, 93
Brown, T. E., 17
Brown, W. D., 256
Broyer, T. C., 351, 365, 372, 374
Bruce, V. M., 441
Brucker, W., 546, 547, 554
Brugger, J. E., 17, 19
Brummond, D. O., 153, 191
Brunchorst, J., 113
Brunel, A., 140
Brunel-Capelle, G., 140
Bublitz, C., 237, 338, 339
Buchanan, J. M., 70, 143
Buchanan, J. R., 100
Budd, M. A., 555
Buder, J., 18
Buffel, K., 352, 360
Buhler, D. R., 296
Bullock, G. L., 118
Bullwinkel, B., 416, 417, 418, 427
Bülow-Köster, J. V., 234
Bünning, E., 278, 481, 525, 526, 529
Bünsow, R., 444
Buraczewska, L., 134
Burg, E. A., 266, 268, 270, 274, 278, 279, 280, 281, 282, 283, 284, 285, 287, 289, 291, 295
Burg, S. P., 265-302; 266, 268, 270, 272, 273, 274, 278, 279, 280, 281, 282, 283, 284, 285, 287, 288, 289, 290, 291, 292, 293, 295, 296, 297
Bürgin-Wolff, A., 110, 112, 115
Burkina, Z. S., 359, 360
Burma, D. P., 456
Burns, J. J., 330, 331, 332, 333, 337, 338, 340
Burr, G. O., 95, 100, 231, 232
Burr, M. M., 232
Burris, R. H., 11, 110, 117, 119, 120, 121, 130, 183, 191, 545, 546, 548
Burston, H., 345
Burström, H., 363, 475, 478, 480
Burton, W. G., 172
Bush, J. A., 118
Butenandt, A., 254
Butler, G. W., 142, 363
Butler, J. A. V., 54, 59, 60, 256
Butler, W. L., 19, 38, 466, 467
Butlin, K. R., 211
Buttrose, M. S., 304, 312, 313, 315, 317
Buvat, R., 39, 40
Byrner, L. C., 206

C

Cabib, E., 311
Cailleau, R., 65, 72
Cain, J. C., 92, 96, 97
Cairncross, I. M., 320
Caldecott, R. S., 446
Caldwell, E., 345
Caldwell, P. C., 386, 393
Calvin, M., 4, 5, 15, 20, 123, 132, 151, 153, 154, 155, 158, 159, 164, 165, 181, 183
Cama, H. R., 454
Cameron, S. H., 82
Campbell, P. N., 46, 51
Camus, G. C., 554
Cannell, G. H., 100
Canny, M. J., 304, 305
Cantino, E. C., 483
Cantoni, G. L., 202
Canvin, D. T., 252, 253, 450
Caparoli, L., 40
Capindale, J. B., 166, 167
Caplin, S. M., 539
Cardini, C. E., 306, 311
Carlier, G., 186
Carlton, B. C., 277, 296
Carminatti, H., 311
Carns, H. R., 421, 422, 423, 429, 431
Carpenter, W. D., 252
Carr, D. J., 360, 370, 374
Carter, H. E., 242, 243, 247
Cartledge, J. L., 493
Castle, E. S., 525
Cathey, H. M., 444, 445, 473, 480
Cavazza, L., 447
Cederstrand, C., 19, 468
Cedrangolo, F., 135
Celmer, W. D., 242, 243
Chace, E. M., 267
Chaikoff, J. L., 246
Chailakhyan, M. Kh., 178
Chain, E. B., 217
Chakravarti, S. C., 502
Chakravorty, M., 456
Chalmers, R. V., 19
Chalofin, H., 344
Chamblee, D. S., 117
Chan, T. T., 304, 312
Chance, B., 14, 16, 190, 191, 193, 194, 457
Channon, H. J., 246
Chao, F. C., 47, 48, 51, 56, 57, 58
Chapeville, F., 202, 216
Chapman, H. D., 82, 85, 89, 92, 93, 104
Chargaff, E., 33, 53, 56, 454
Chatterjee, G. C., 339, 340
Chatterjee, I. B., 337, 338, 339, 340
Chaudri, I. I., 442
Chen, H. K., 110, 113
Chen, P. Y., 256
Chen, Y. T., 330, 331, 332, 333, 334, 335, 336, 337, 338, 341, 345, 346
Cheniae, G. M., 225-64; 121
Cherry, J. H., 46, 143, 454
Chetverikova, E. P., 569
Chevillard, L., 174, 177
Chiang, S. M., 438
Chiba, S., 497
Chiba, Y., 29, 33, 256
Chibnall, A. C., 246, 255
Chinard, F. P., 354
Ching, T. M., 449
Chinoy, J. J., 447
Chopard-dit-Jean, L. H., 251
Chow, C. T., 31, 33
Christensen, B. E., 267, 268, 271
Christensen, E., 503
Christidis, B. G., 439
Church, C. G., 266, 267
Clague, J., 345
Clancy, M. J., 310
Clark, A. M., 491
Clark, B., 245
Clark, B. E., 447
Claybrook, J. R., 445

Clayton, R. K., 15, 18
Clements, H. F., 94, 100
Clendenning, K. A., 28, 191
Cline, A. L., 68
Clowes, R. C., 205
Cohen, D., 440, 448
Cohen, G. N., 46
Cohen, M., 561
Cohen, P. P., 131, 146
Cohen, S. S., 55, 57, 59
Cohen-Bazire, G., 16, 20
Cohn, P., 54, 59
Colburn, J. R., 118
Cole, K. S., 396
Coleman, C. M., 248
Coleman, R. G., 133
Collander, R., 91, 356, 357
Collins, F. D., 246
Collins, R. P., 566
Colmano, G., 38, 258
Colter, J. S., 60, 62
Colvin, J. R., 311
Comfort, A., 489, 490
Comly, L. T., 51, 64
Commoner, B., 15, 53
Conn, E. E., 457
Contopoulou, R., 8, 250, 251
Conway, E. J., 386, 391
Cook, J. A., 85, 103
Cooper, D. C., 112
Cooper, J. R., 157
Cooper, W. C., 91, 92, 276, 404, 406, 407, 419, 430, 498, 499
Coppens, N., 234
Cordova, C. C., 551
Cori, C. F., 311
Cornforth, J. W., 258
Correns, C., 522
Cory, R., 94
Costa, A., 103
Cottam, W. P., 495
Couchman, J. F., 317
Couerbe, J., 144
Countryman, J. L., 69
Couri, D., 156
Courtois, J. E., 310
Cousins, H. H., 266, 267, 268
Cowdry, E. V., 489
Cowie, D. B., 68, 204
Cox, R. A., 60
Craft, C. C., 274, 283, 284, 287, 288, 289, 291, 292, 294, 295
Crafts, A. S., 352, 356, 357, 368, 372, 375
Crampton, C. F., 54
Crane, E. E., 380
Crane, F. L., 31, 35, 46, 192, 251, 252
Crane, H. L., 87, 88, 91, 92, 95, 97, 98
Crathorn, A. R., 256
Cree, C. B., 85, 95
Creech, B. G., 226
Cremer, J. E., 181
Crick, F. H. C., 46, 48
Criddle, R. S., 256
Cristofori, F., 39, 40, 41
Crocker, T. T., 65, 72
Crocker, W., 265, 266, 267, 270, 276, 277, 278, 282, 437, 439, 440, 448, 492, 493
Crombie, W. M., 33, 230, 233, 450
Cromwell, B. T., 240
Crooke, W. M., 319
Croon, I., 320
Crosby, D. G., 255
Cruickshank, D. H., 453
Cruickshank, E. M., 337, 345, 346
Cruzado, H. J., 500
Cunningham, W. L., 314
Currier, H. B., 352, 356, 357, 368, 372, 375
Curry, G. M., 481
Curth, P., 496
Curtis, H. J., 396
Cutler, H. G., 255
Cutter, V. M., 560
Cutting, S. G., 498
Czaja, A. T., 518
Czosnowski, J., 545

D

Dagley, S., 51
Dainty, J., 379-402; 355, 356, 357, 358, 359, 362, 363, 369, 380, 388, 390, 391, 393, 394, 395, 396, 397
Daly, J. M., 176, 561, 563, 565
Dam, H., 35, 252
Damodaran, M., 145
Dandliker, W. B., 427
Daniel, H., 33, 247, 248, 249, 257
Daniel, V.,.64
Danielson, J., 404, 408, 414, 415, 416, 427
Danon, D., 60, 61
Darby, R. T., 179, 193
Darlington, H. T., 492
Dart, P. J., 109
Das, M. L., 31
Das, N. K., 540, 543
Das, T. M., 447
Das, V. S. R., 187, 188
Dassù, G., 37, 39, 40, 41
Datta, A. G., 156
Dauben, W. G., 232
Davenport, H. E., 14, 30, 123, 191
Davern, C. I., 67
David, S. B., 305
Davidson, O. W., 270, 276
Davies, D. D., 171, 238
Davis, B. D., 202
Davis, J. B., 273
Davis, R. V., 416, 418, 427
Davis, W. B., 266, 267
Davy, J., 310
Dawid, J. B., 241
Dawson, R. M. C., 243
Deal, P. H., 479
Deatherage, W. L., 314
Debuch, H., 33, 35, 37
de Duve, C., 190
de Fekete, M. A. R., 311
Dekock, P. C., 175, 178
Delbrück, A., 215
Delbrück, M., 483
Delcambe, L., 553
De Leo, T., 452
de Lint, P. J. A. L., 474, 481
Delisle, A. L., 497
Delouche, J. C., 438, 439, 447
Delwiche, C. C., 118, 133, 240
DeMaggio, A. E., 510
DeMeio, R. H., 215
Demole, V., 331
Dennis, D. T., 321
Denny, F. E., 266, 267, 268, 269, 270, 271, 275, 276, 277, 279, 281, 284
Dentice di Accadia, F., 217
Denton, C. A., 216
de Ropp, R. S., 554
Devaux, H., 171
Dewey, D. H., 280
Dexter, S. T., 439
Diamond, J. M., 390, 392, 395, 397
Dibble, W. E., 63
Dick, D. A. T., 354
Dickson, A. Q., 500
Dierberger, R., 545
Dils, R. R., 238
Dimond, A. E., 270, 275, 294
Dintzis, H., 47, 51, 54, 56, 57
Dintzis, H. M., 63, 64
Dirksen, M., 70
Dischendorfer, O., 343, 344
Dituri, F., 226
Dixon, M., 153
Doershuk, A. P., 329, 330, 333
Dokhan, R., 144
Doman, N. G., 206
Donohue, J., 61
Doorenbos, J., 501, 502
Döpp, W., 513, 514, 516, 517, 518
Dorrestein, R., 9, 20
Dostâl, R., 276, 403
Doty, P., 48, 53, 56, 60, 61
Doubt, S. L., 414
Doudoroff, M., 8, 250, 251

Dowben, R. M., 338
Dowling, E. J., 117, 118
Downs, R. J., 466, 470, 473, 480
Drake, M., 92, 95
Drawert, H., 37
Drosdoff, M., 87, 88, 89, 90, 95, 97, 101, 102, 103, 104
Ducet, G., 171-200; 174, 175, 176, 177, 178, 179, 180, 181, 186, 187, 189, 191, 192, 196, 359, 360
Duerken, J. D., 68
Dugger, W. M., Jr., 561, 565
DuLock, J. B., 234
Duncan, C. W., 94
Duodoroff, M., 160
Duperon, R., 456
Duranton, H., 144
Dure, L. S., 315, 452
Durham, L. J., 166
Durham, V. M., 439, 447
Dutton, G. G. S., 320
Duysens, L. N. M., 13, 14, 19, 20
Dykins, F. A., 282

E

Eakin, R. E., 522, 523
Eaton, F. M., 365, 367
Eberhardt, F., 559
Eberhardt, F. M., 246
Eberts, F. S., Jr., 545, 548
Edelman, I. S., 53, 55, 59, 60
Edelman, J., 305, 306, 307, 316, 317, 318, 452
Edlefsen, N. E., 372, 374
Eggleston, L. V., 138
Ehrenberg, L., 493
Ehret, Ch. F., 465
Ehrler, W. L., 100, 101
Ehrlich, B., 35, 251, 252
Eisen, H. N., 68, 69
Eisenberg, H., 60, 62
Ekdahl, I., 111, 345, 348
El-Kinawi, S. A., 143
Ellem, K. A. O., 60, 62
Ellfolk, N., 114, 121
Elliott, R. F., 38
Ellis, R. J., 187
Ellner, P., 140
Elmer, O. H., 266, 268, 271, 277
Elson, D., 56, 57, 69
Elstad, V., 466, 468, 475
Elstad, V. B., 468, 474, 475
Embleton, T. W., 82, 85, 91, 93, 94, 95, 96, 100, 101, 102, 103
Emenova, S. V., 186
Emerson, R., 1, 14, 17, 19
Emmert, F. H., 84, 85, 87, 91, 92, 95, 96, 97
Engel, E. K., 37
Engel, O. S., 451
Engel, P. S., 342
Engelbrecht, L., 139
Engelhardt, W. A., 181
Engelmann, T. W., 17
Engles, D. T., 282
Enileev, Kh. Kh., 439
Enns, T., 354
Entenmann, C., 226
Erbland, J., 244
Ergle, D. R., 84, 92, 454, 455
Erickson, A. E., 447
Erickson, R. E., 35, 251
Erkama, J., 114
Erlander, S. R., 314
Ermilov, G. B., 448
Errera, M., 65, 72
Esashi, Y., 442, 444
Essers, W., 272
Essner, W., 317
Etherton, B., 393, 399, 400
Etzold, H., 483, 525, 526
Euler, H., 343
Evans, C., 331, 332
Evans, H. J., 118, 121, 179, 503
Evans, J. M., 316
Evans, W. R., 454
Evenari, M., 437, 441, 443, 444, 445, 446, 455
Eyster, C., 17

F

Fahmy, I., 92, 103
Fahraeus, G., 110, 111, 112
Falk, H., 37
Falk, J. E., 114
Faludi-Daniel, A., 132
Farkas, G. L., 178, 182, 562, 563, 565, 569, 571
Fawcett, R. G., 122
Fearon, W. R., 144
Fedorov, M. W., 109
Feinbrun, N., 446
Feingold, D. S., 305, 308, 309
Feldman, M., 56, 59
Fellers, C. R., 345
Fellig, J., 247
Fenn, W. O., 172, 174
Ferenczy, L., 447
Fergus, C. L., 295
Ferguson, J. D., 142
Ferguson, J. O., 305
Ferguson, W., 269, 276
Fernández-Morán, H., 50
Ferrari, R. A., 244, 246, 249
Fewson, C. A., 159, 160, 161
Fidler, J. C., 280, 282, 290
Fielding, L., 238, 239
Fiers, W., 143
Figard, P. H., 239
Filippovich, I. I., 186, 187
Finch, A. H., 268, 280, 345
Finch, J. T., 63
Findlay, G. P., 395
Finean, J. B., 28
Finer, E. M., 467
Finkle, B. J., 305, 329, 331, 332, 333, 334, 337
Finks, J. L., 513
Fischer, C. W., 269, 276
Fischer, H., 2
Fisher, D. F., 268, 269, 270, 275, 279, 280
Fisher, E., 219, 220
Fisher, J. E., 500
Fisher, M. E., 452
Fitzgerald, P. H., 438
Flavin, M., 227
Fleischer, S., 252
Fleming, I. D., 314
Fleming, J. R., 452
Fleming, J. W., 93
Flesher, D., 456, 478
Fletcher, W. W., 117, 119
Flint, L. H., 524
Foda, H. A., 439, 446, 449
Folch, J., 256
Folkers, K., 35, 144, 251
Folkes, B. F., 129
Fork, D. C., 19
Formica, J. V., 227
Forsyth, W. G. C., 250
Forti, G., 192
Foster, R. E., 103
Foster, R. J., 399, 400
Foti, L., 452
Fotyma, M. W., 134
Fourneau, J., 553
Fowden, L., 132, 454
Fox, R. L., 122
Fraenkel-Conrat, H., 46, 53
Franck, J., 19, 20
Frank, H., 502
Frank, P., 440, 449
Franke, W., 344, 450
Fred, E. B., 109, 110, 113, 115, 122
Fredrick, J. F., 316
Freedman, D. L., 227
Frehse, H., 450
Frei, E., 322, 323
Frei, Y. F., 38
Freiberg, S. R., 136, 140
French, C. S., 3, 19, 33, 38, 39, 251
French, D., 310, 314
Frenkel, A., 6, 9, 14, 172
Frenster, J. H., 48, 49
Fresco, J. R., 60, 61
Frey, A., 356
Frey-Wyssling, A., 39, 40, 41, 312
Friedman, H., 143
Friend, J., 32, 251

Fries, N., 145
Fritsche, R., 498, 499
Fromageot, P., 202, 206, 216, 217
Fudge, B. R., 92, 94, 266
Fujii, R., 451, 452, 454, 456
Fujii, T., 442, 443, 444
Fujimoto, D., 212
Fujimoto, Y., 48
Fukui, T., 256, 257, 451
Fukumoto, S., 442, 444
Fulco, A. J., 235, 236
Fuller, K. W., 323
Fuller, R. C., 16, 31, 154, 155, 159
Funahashi, S., 142, 457
Funasaki, K., 305
Furr, J. R., 498, 499
Furth, J. T., 70

G

Gabrielsen, E. K., 252
Gabunya, M. K., 266, 268
Gaby, W. L., 256
Gaff, D. F., 360, 370, 374
Gaffey, C. T., 395
Gaffron, H., 8, 10, 14, 15, 16, 151, 154, 250
Gafin, J. E., 312
Gaillard, B. D. E., 319
Gairon, S., 358
Galanos, D. S., 242, 243
Galli, A., 331
Gallo, J. R., 85
Galston, A. W., 119, 265, 478, 501, 544, 545, 561
Gammon, N., 87, 95, 96, 97
Gane, R., 266, 267, 268, 270, 272, 274, 280, 281, 284, 286, 287, 288, 289
Ganguli, N. N., 453
Ganguly, J., 228
Garber, M. J., 100
Garcia, I., 144
Gardner, F. E., 98, 404, 406, 407, 419, 430, 497
Gardner, I. C., 123, 124, 132
Gardner, L., 133
Gardner, M. E., 94
Gardner, W. R., 366
Garegg, P. J., 320
Garner, J. M., 560
Garrard, E. H., 117
Gascoine, J., 311
Gasporyan, A. G., 343
Gassman, L., 317
Gates, C. T., 46
Gauch, H. G., 201
Gaur, B. K., 180, 404, 410, 419, 421, 422, 423, 424, 425
Gautheret, R. J., 533, 550, 554
Gawadi, A. G., 278
Gayrel, P., 142
Gehrig, R. F., 138
Geiduschek, E. P., 70
Gellerman, J. L., 226
Gentile, A. C., 544
Gentile, C. A., 449
Geraldson, C. M., 83
Gerard, R. W., 172, 174
Gerhart, J. C., 143
Gerloff, G. C., 96, 118
Gerola, F. M., 37, 39, 40, 41, 404, 412
Gerretsen, F. C., 17
Gest, H., 10, 11, 14
Gewitz, H.-S., 165
Gezundheit, Z., 455
Ghosh, J. J., 337, 339, 340
Ghosh, N. C., 337, 338, 339, 340
Gibbs, M., 5, 31, 153, 157, 159, 160, 161, 165, 167, 171, 181, 201, 202, 217, 249
Gibbs, R. D., 357
Gibbs, S. P., 35, 37
Gibson, A. H., 110, 117
Gibson, D. M., 226, 227
Gibson, K. D., 238, 239
Gierer, A., 67
Giese, A. T., 473
Gifford, E. M., Jr., 33
Gigg, R. H., 242, 243
Gilbert, S. G., 95, 96, 99
Gilbert, W., 69, 71
Gilkeson, A. L., 92
Gillis, J., 342
Ginsburg, B. Z., 323
Ginsburg, V., 249, 306
Giovanelli, J., 31
Girardin, J. P. L., 265
Giri, K. V., 310, 454
Giroud, A., 342, 343, 344
Gladstones, J. S., 494
Glaser, L., 249
Glasziou, K. T., 305, 362, 363
Glavind, J., 252
Glynn, I. M., 398
Globerson, A., 56, 69
Gloor, U., 251
Gmelin, R., 147
Goddard, D. R., 171, 172, 176, 179, 193, 537, 545, 559, 565, 572
Goddard, R., 501
Godson, G. N., 256
Goebel, K., 496
Goedheer, J. C., 18, 20, 39
Goheen, A. C., 85, 103
Golaszewski, T., 33
Goldberg, I. H., 215, 258
Goldemberg, S. H., 311
Golden, J. D., 92
Goldfine, H., 235
Goldman, D. E., 383
Goldmann, M., 70
Goldsmith, M. H. M., 422
Goldstein, L., 65, 72
Goldthwait, D., 68
Golubevo, P. F., 455
Goo, M., 446
Goodall, D. W., 84, 88
Goodsall, R. A., 257
Goodwin, T. W., 18, 33, 258
Gordon, R. C., 122
Gordon, S. A., 477
Gorham, P. R., 246
Gorter, C. J., 410, 479
Gorton, B. S., 91, 92, 522, 523
Goryaev, M. I., 319
Goss, J. A., 444, 445
Goto, Y., 453
Gottlieb, D., 560
Gottschall, V., 479, 496
Govindjee, 19, 468
Grabe, D. F., 438
Gracz, L., 447
Graffi, A., 545
Graham, P. H., 114
Granick, S., 28
Grant Lipp, A. E., 447, 449
Gräser, H., 143
Grassl, M., 131
Grawer, R. P., 144
Gray, C. T., 143
Grazi, E., 156
Green, D. E., 252, 256, 258
Green, M. H., 47, 58, 60, 62
Greenberg, D. M., 238, 239, 240
Greenblatt, C. L., 37
Greene, L., 502
Greenwood, A. D., 372
Greenwood, C. T., 313, 314
Greenwood, E. A. N., 118, 119
Gregory, F. G., 84, 303
Gregory, J. D., 202, 207, 210, 215, 216, 217
Gregory-Allen, D., 94, 95
Greiner, C. W., 272
Greull, G., 230
Grieg, J. K., 95, 97
Gries, G. A., 316
Griffith, M. M., 475, 478
Griffiths, D. G., 280, 305
Griffiths, M., 16, 20
Griffiths, S. K., 196
Grigsby, B., 443
Grimm, R., 567
Grishina, G. S., 182
Groenewegen, H., 104, 364
Grogan, C. O., 314
Grollmann, A. P., 338, 339
Gros, F., 46, 58, 69, 71
Gross, C. R., 272, 280
Gross, J., 53
Gross, J. A., 30
Grossman, L., 60
Groth, D. P., 239
Grünanger, P., 192

Grunberg-Manago, M., 60
Guha, B. C., 337, 338, 339, 340
Guinn, G., 454, 455
Guitton, Y., 134
Gunckel, J. E., 503
Gunja, Z. H., 314
Gunthardt, H. M., 493
Gupta, S. M., 447
Gurin, S., 226
Guthrie, J. D., 344
Gutsche, A. E., 548
Györffy, B., 116

H

Haagen-Smit, A. J., 427
Haas, D. W., 193, 196
Haavik, A., 232
Haber, A. H., 437, 441, 444, 445, 446, 448, 455, 478
Habermann, H. M., 186, 438
Haccius, B., 403
Hackett, D. P., 177, 178, 184, 192, 193, 194, 195, 196, 456, 457
Hackneys, F. M. V., 285
Hagan, R. M., 351
Hageman, R. H., 32, 46, 143, 452, 454, 456, 478
Hagihara, B., 546
Hahn, I.-M., 478
Haining, J. L., 256, 257
Haldiman, E., 316
Hale, W. S., 256
Halenz, D. R., 227
Halfon-Meiri, A., 93
Hall, A. D., 495
Hall, B. D., 47, 48, 53, 56, 58, 60, 61, 62, 69, 70, 71
Hall, C. E., 63
Hall, D. O., 20
Hall, E. G., 285
Hall, L. M., 131
Hall, R. J., 232
Hall, W. C., 268, 269, 271, 275, 277, 279, 280, 281, 289, 294, 296, 403, 421, 424
Hallsworth, E. G., 118, 119
Halvorson, H. O., 46, 52, 56, 68, 69, 455, 456
Hamilton, J. G., 226
Hamilton, J. K., 320
Hamilton, M. G., 48, 51, 53, 54, 55, 56, 57, 58, 59, 63
Hamilton, S., 304
Hamner, C. L., 46
Hamner, K. C., 100, 101, 342
Hämmerling, J., 496
Hamon, F., 174, 177
Hanahan, D. J., 246, 258
Hand, M. E., 439
Handler, P., 129, 135, 136
Hanford, J., 238
Hannah, A., 490
Hansen, E., 266, 267, 268, 271, 280, 281, 282, 283, 284, 285, 287, 288, 289, 290, 296
Hanson, J. B., 46, 51, 143, 452
Hanzon, V., 50, 52
Harada, N., 206
Harada, T., 215, 217
Hardenburg, R. E., 276
Hardman, E. E., 230, 450
Harhash, A. W., 547
Harley, C. P., 92, 93, 94
Harley, J. L., 174
Harmon, E. A., 251, 252, 256, 257
Harold, F. M., 48
Harper, J. L., 438
Harrington, J. F., 438, 439
Harris, A. Z., 159
Harris, E. J., 354, 383
Harris, G., 314, 320
Harris, J. B., 134
Harris, J. I., 59, 60
Harris, L. J., 343
Harris, R. J. C., 46, 48, 56, 57
Harris, T. H., 256
Harrison, B. J., 492
Hart, R. D., 316
Hartigan, J., 310
Hartley, G. S., 257
Hartman, H., 266, 267, 280
Hartman, S. C., 143
Hartree, E. F., 14, 191, 194
Hartz, E. B., 282
Harvey, E. M., 265, 270, 277
Harvey, R. B., 266, 269, 270, 277, 278, 279, 280, 282
Haselkorn, R., 60
Hasenkamp, J., 2
Hasenmaier, G., 147
Hashimoto, T., 445, 449
Haskin, F. A., 457
Hass, A. R. C., 91
Hassan, M. U., 338
Hassid, W. Z., 305, 306, 308, 309, 311
Hatanaka, A., 255
Hatch, M. D., 456
Hatefi, Y., 252
Hatt, J. T., 144
Hattori, A., 136
Haug, A., 474
Hauge, J. G., 68
Haupt, W., 466, 475, 476, 524, 526, 527
Hauschild, A. H. W., 240
Havir, E. A., 167
Havis, L., 92
Hawkins, A. R., 561
Hawthorne, J. N., 241, 242, 243
Haxo, F. T., 19
Hayashi, M., 70, 71
Hayes, P., 158
Hayward, A. C., 250
Hayward, H. E., 366
Heath, O. V. S., 502
Heber, U., 29, 32, 255
Hecker, E., 254
Heeney, H. B., 82, 93, 104
Hegarty, M. P., 133, 140
Hegre, C. S., 227
Heilbronn, A., 509
Heinze, P. H., 284, 287
Heise, J. J., 15
Heit, C. E., 447
Heitefuss, R., 568, 570
Heitz, E., 37
Hell, A., 65, 72
Heller, D., 226
Hellriegel, R., 81
Helmkamp, G., 60, 63
Helmreich, E., 68, 69
Hely, F. W., 116, 122
Hemming, H. G., 479
Henderson, J. H. M., 545, 555
Henderson, R. W., 310
Hendler, R. W., 256
Hendricks, R. H., 206
Hendricks, S. B., 99, 437, 438, 439, 440, 441, 443, 448, 465, 466, 467, 468, 469, 470, 473, 474, 480, 483, 524
Hendry, R. A., 247
Henry, S. M., 216
Henseleit, K., 130
Herich, R., 453
Herklots, G. A. C., 277
Hermodsson, L. H., 50
Herrero, F. A., 268, 269, 277, 280
Herschberg, L., 95
Hershko, A., 59
Herzfelder, H., 520, 522
Heulin, F. E., 266, 273, 274, 277, 281, 282, 285
Hevér, D. B., 2
Hevesy, G., 354
Hewitt, E. J., 89, 123, 348
Hewitt, W. B., 94
Heydecker, W., 449
Heydeman, M. T., 252, 450
Heyes, J. K., 46
Hiatt, A. J., 192
Hiatt, H., 69, 71
Hiatt, H. H., 330, 333
Hibbard, A. D., 100, 345
Hibbard, R. P., 266, 267, 278
Hibbert, H., 545, 547, 548, 572
Higgins, H. G., 316
Highton, P. J., 63
Higinbotham, N., 393, 399, 400
Hildebrandt, A. C., 545,

546, 547, 550
Hilderson, H., 447
Hilditch, T. P., 232, 233
Hill, G. R., 206
Hill, H., 82, 93, 104
Hill, R., 3, 14, 20, 31, 186, 191, 192
Hillman, W. S., 466, 468, 478, 480
Hills, G. M., 138
Hilz, H., 208, 209, 210, 215
Hino, S., 115
Hirai, T., 571
Hirokawa, T., 453
Hirst, E. L., 306, 319, 320
Hitchcock, A. E., 270, 276, 277, 278, 282, 502
Ho, H. K., 319
Hoagland, D. R., 365
Hoagland, M. B., 46, 57, 64
Hoch, G. E., 120, 121
Hockenhull, D. J. D., 203
Hodge, A. J., 40
Hodgkin, A. L., 382, 383, 384, 385, 386, 387, 388, 390, 391, 393, 398, 400
Hoerger, E., 232
Hofer, A. W., 119
Hofer, E., 354
Hoffhine, C. E., 144
Hoffman, I., 345
Hoffmann, A., 512
Hoffman-Ostenhof, O., 241
Hohl, H. R., 537, 554
Hokin, L. E., 245, 258
Hokin, M. R., 245, 258
Holden, M., 31
Holldorf, A., 239
Hollingworth, B. R., 56, 57, 58
Holly, F. W., 144
Holmberg, D. M., 91
Holmes, K. C., 63
Holmes, R. S., 96
Holm-Hansen, O., 118, 123, 132, 183
Holt, A. S., 2, 3, 33
Holzer, H., 239
Honda, S., 190
Hongladarom, T., 190
Hood, S. L., 17
Hope, A. B., 355, 357, 358, 359, 362, 363, 369, 380, 388, 390, 391, 395, 396, 397
Hopper, C. L., 232
Horecker, B. L., 7, 151, 153, 155, 156, 157
Horenstein, E. A., 483
Hori, S., 305
Horning, M. G., 226, 229
Horowicz, P., 382, 388, 390, 391, 400
Horowitz, H. H., 329, 330, 333
Horowitz, N. H. 133, 204
Horton, A. A., 20
Hotta, Y., 46, 49, 482, 530
Hough, L., 317, 319
Howell, R. W., 172, 456, 457
Howlett, F. S., 90, 93, 103
Howton, D. R., 232, 235
Hrnciar, G., 82, 85, 87, 94, 95, 96, 97, 98
Hsu, R., 277
Hu, A. S. L., 52, 68
Huang, R. C., 49, 453
Huberty, M. R., 103
Hübner, G., 359
Hübscher, G., 238, 245
Hudson, W., 153
Hughes, D. W., 2
Hulme, A. C., 267
Hultin, T., 54, 64
Humphrey, B. A., 116
Humphreys, T. E., 561, 565
Hunt, K., 320
Hunter, A. W. S., 494
Hunter, G. D., 256, 257
Hunter, J. K., 404, 410, 421, 422
Hunter, J. R., 447
Hurel-Py, G., 523
Hurich, J., 145
Hurst, V., 404, 408, 414, 415, 416, 427
Hurwitz, J., 70, 153, 157
Huxley, H. E., 63
Hyde, E. O. C., 438
Hyde, J. L., 3
Hylmö, B., 363, 365

I

Ibanez, M. L., 215, 216
Ibuki, F., 57
Ichihara, A., 238
Ichimara, K., 454
Ichimura, K., 46
Ihawa, M., 145
Iizuka, T., 216
Ikuma, H., 445
Ilg, H., 278
Illingworth, B., 311
Ingraham, L. L., 177
Ingram, M., 52
Inman, R. E., 561
Isaas, W. E., 268, 278
Isakovic, K., 69
Isawa, M., 46
Isham, P., 345
Isherwood, F. A., 329-50; 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 340, 341, 453
Ishikawa, S., 442, 443, 444
Ishikawa, T., 443
Ishimoto, M., 211, 212, 214, 215
Isler, O., 251
Isoburo-Nagai, 520
Itahashi, M., 216, 217
Ito, S., 451
Ivanov, N. N., 266, 268
Ivanova, T. M., 569, 570
Iwamura, T., 55, 57
Iwanoff, N. N., 129, 130
Izawa, M., 454

J

Jablonski, H. R., 539, 541
Jacard, P., 356
Jacinto, R., 319
Jackson, G. A. D., 337
Jackson, J. M., 277
Jacob, F., 69, 70, 71, 513
Jacob, M. J., 226
Jacobi, G., 29, 160
Jacobs, W. P., 403-36; 403, 404, 406, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 420, 421, 422, 427, 429, 432, 525
Jacobson, L., 86, 560
Jacobson, M., 254
Jaffe, L., 525, 526
Jaffe, L. F., 507, 525, 526
Jagannathan, V., 212, 213
Jagendorf, A. T., 14, 16, 30, 31, 32, 188, 189, 231, 255, 570
Jakoby, W. B., 153
James, A. T., 226
James, W. O., 171, 176, 177, 187, 188, 192, 563
Jang, R., 319, 329, 331, 333
Janick, J., 495
Jankovič, B. D., 69
Janson, E. F., 319
Jansson, G., 447, 448
Jayasekera, R. D. E., 509
Jefford, T. G., 305, 318
Jenden, D. J., 173, 174
Jensen, H. L., 115, 118
Jensen, P. K., 138
Jha, V. R., 279
Johns, T., 274
Johnson, A. G., 499
Johnson, C. M., 118
Johnson, E. L., 502
Johnson, G. W., 495
Johnson, I. S., 551
Johnson, J. A., 452
Johnston, E. S., 524
Johnston, F. B., 51
Johnston, M. J., 320
Johnston, R. J., 395, 397
Jones, E. W., 348
Jones, H., 304
Jones, I. G., 314
Jones, L. H. P., 96
Jones, M. E., 131, 134
Jones, M. J., 203
Jones, W. A., 254

Jones, W. W., 82, 85, 89, 91, 93, 94, 95, 96, 100, 101, 102, 103, 345
Jonstone, I. H., 145
Jordan, D. C., 117
Jordan, E., 29, 30
Jost, M., 15
Jungwirth, C., 241
Junisawa, R., 250
Jurisic, J., 406
Jussier, J., 547
Jütting, G., 131, 227, 228

K

Kaback, R., 220
Kabukawa, T., 342
Kadman-Zahavi, A., 443
Kahn, A., 444, 445, 448
Kahn, J. S., 31, 231
Kainuma, S., 319
Kaji, A., 210, 215, 217
Kalyankar, G. D., 145
Kamen, M. D., 3, 6, 10, 11, 14, 15, 16, 17, 30
Kameyama, T., 71, 212, 214, 215
Kamin, H., 129, 135, 136
Kamiya, N., 358, 365
Kamp, B. M., 20
Kandeler, R., 469
Kandler, O., 5, 159, 183, 249, 554
Kar, B. K., 266, 279
Kar, H. C., 338
Kari, S., 453
Karmen, A., 229
Kasai, Z., 304
Kasting, R., 133
Katanuma, N., 121
Kates, M., 246, 248
Kating, H., 129, 134, 137
Kato, Y., 524, 525, 527
Katoh, S., 31
Katz, B., 383, 384, 388
Katz, E., 9, 15, 20
Kaufer, J., 338, 340, 563, 565
Kauffmann, T., 32, 257
Kaur, R., 465
Kawade, Y., 60
Kawaguchi, S., 158
Kawakami, M., 216
Kawamura, S., 319, 320
Kawana, A., 449
Kawashima, N., 206
Kawashima, Y., 304
Kay, L. D., 159
Kaziro, Y., 227, 228
Kearney, P. C., 165
Kefford, N. P., 111, 112, 119
Kegel, L. P., 35, 251
Kelbitsch, H., 554
Kellenberger, E., 51
Keller, E. B., 48, 53
Kelley, W. C., 342, 343
Kelly, J. N., 267, 268, 272
Kelly, S., 305, 330, 332, 333, 334, 337
Kemmer, E., 499
Kemp, P., 243
Kemp, W. G., 571
Kempner, W., 176
Kendall, J. N., 410
Kennedy, E. P., 237, 238, 239, 242, 244
Kennett, B. H., 273, 274
Kenten, R. H., 17
Kenworthy, A. L., 88, 99, 101, 103
Kern, H., 33
Kern, M., 68, 69
Kerr, P. C., 133
Kertesz, D., 177
Kessler, B., 46
Kessler, E., 17, 129
Kessler, G., 305, 308
Kessler, W., 342, 345
Ketellapper, H. J., 358, 360
Keulemans, A. I. M., 274
Key, J. L., 46, 143
Keynes, R. D., 386, 387, 393, 398
Keys, A. J., 305, 307, 309, 452
Keyssner, E., 548
Khan, A. W., 311
Khan, N. A., 319, 320
Kholler, V. A., 185
Kidd, F., 267, 280, 281, 282, 284, 286
Kies, M. W., 139
Kihara, H., 58, 68, 69, 145, 146
Kihara, H. K., 52, 68
Kilby, W. W., 89
Kim, Y. S., 314, 315
Kimball, M. H., 280
Kimpyo, T., 319
Kindel, P. K., 159, 160, 161
King, C. G., 329, 330, 332, 333, 343
King, J. E., 142
King, N. K., 17
Király, Z., 178, 182, 562, 563, 565, 569, 571
Kirby, K. W., 319
Kirk, M., 32, 153, 161, 164
Kirkland, R. J. A., 309
Kirkpatrick, J. D., 94, 95
Kirsop, B. H., 439, 447, 448, 452
Kitagawa, M., 144
Kitchener, J. A., 362
Kittler, M., 208, 209, 210
Kiyasu, J., 244
Kizuno, T., 319
Kjaer, A., 147, 202, 205
Klebs, G., 522, 523
Kleczkowski, K., 129, 134
Kleiber, H., 472, 476
Klein, D. T., 116
Klein, G., 548
Klein, H. P., 226
Klein, R. M., 116, 533, 535, 537, 538, 539, 543, 544, 545, 546, 547, 548, 552, 553, 572
Klein, S., 437-64; 39, 40, 41, 446, 448, 452, 453, 455
Klein, W. H., 466, 468, 474, 475, 477, 478, 480
Kleinzeller, A., 232
Klingenberg, M., 196
Klingman, G. C., 447
Klinman, N., 220
Klotz, I. M., 201
Klouwen, H., 252
Klug, A., 63
Klussman, E., 343
Kluyver, A. J., 2, 7, 12, 201
Klybas, V., 157
Knape, G., 208, 210
Knappe, J., 131, 227, 228
Knight, A. H., 319
Knight, L. I., 265, 266, 267, 270, 276, 282
Knight, T. A., 494, 497, 498, 500
Knivett, V. A., 138
Knox, W. E., 129
Knupp, J. L., Jr., 552, 553
Kny, L., 265
Kobayashi, Y., 273
Kobel, F., 499
Ködding, R., 257
Koehler, J. K., 51
Koerner, J. F., 70
Kofler, M., 251
Kohlbecker, R., 475
Kohman, E. F., 343
Kohn, H., 14
Koizumi, T., 342
Kojima, M., 453
Kok, B., 9, 20, 39
Kolesnikov, P. A., 176, 182, 186
Koller, D., 437-64; 437, 439, 440, 441, 443, 446, 447, 448
Kolousek, J., 132
Kommedahl, T., 439
Konarev, V. G., 46
Kondo, Y., 212, 214, 215
Konishi, S., 304
Könitz, W., 473
Konrad, E., 178, 182
Koo, R. C. J., 85, 90, 93, 95, 97
Koontz, H., 94
Koretskaya, T. F., 185
Kornberg, A., 245, 312
Kornberg, H. L., 252, 450
Kornberg, S. R., 312
Kornfield, S., 249
Korzenovsky, M., 138

Kosarew, G., 447
Kosel, Ch., 32
Koshtoyants, N. N., 454
Kosow, D. P., 227
Koukol, J., 31
Köves, E., 447
Kowallik, W., 482
Koyama, J., 211, 212, 214, 215
Kozlowski, T. T., 449
Krall, A. R., 176, 183, 186
Kramer, P. J., 356, 357, 358, 362, 363, 365, 372
Krasnovskii, A. A., 28, 38, 183, 256
Krassinski, N., 277
Kratky, O., 28
Kratz, W. A., 160
Krauss, W., 345
Kravtsova, B. E., 304
Krebs, H. A., 130, 138, 167
Kreeb, K., 373
Kreger, D. R., 316
Krekule, J., 178
Kreutz, W., 28, 29
Kreutzer, E., 41
Kriger, L., 40
Krippahl, G., 165
Kritchevsky, G., 226
Krogh, A., 354
Krogmann, D. W., 35, 255
Krone, W., 55
Kronenberg, G. H. M., 13
Kronman, M. J., 60, 62
Krotkov, G., 33, 304, 482
Krupka, L. R., 567
Krupka, R. M., 140, 141
Kudryaskova, J. A., 453
Kuff, E. L., 48, 53, 57, 58
Kulescha, Z., 544
Kumagai, T., 442, 444
Kumar, S. A., 454
Kun, E., 201, 202
Kunisawa, R., 8
Kunz, L. J., 139, 143
Kupila, S., 538, 539, 553
Kupke, D. W., 19, 473
Kurland, C. G., 53, 60, 61, 62, 69, 71
Kuroda, K., 365
Kursanov, A. L., 359, 361
Kurtz, E. B., Jr., 235, 444
Kushnirenko, S. V., 185
Küster, E., 403, 404, 405, 430
Kwong, S. S., 91, 92, 99
Kylin, A., 206, 207

L

Labanauskas, C. K., 91, 93, 95, 96, 103
Ladygina, M. E., 190
Lagatu, H., 84, 88
Lahiri, A. N., 447
Laibach, F., 403, 404, 405, 420, 421, 429, 430
Lamb, J. G. D., 92
Lambrecht, R., 2
Lambri, L., 404, 419, 432
Lamfrom, H., 48, 55, 72
Lampen, J. O., 203
Lamprecht, I., 41
Lance, A., 40
Lance, C., 546, 547
Lance, G., 178
Landgraf, J., 477
Lands, W. E. M., 242, 243
Lane, M. D., 227
Lang, A. R. G., 359
Lang, H. M., 4, 31
Lang, K., 234
Lang, W. H., 509
Langdon, R. G., 258
Lange, A. H., 100, 101
Lange, R. T., 115, 122
Langemann, A., 251
Langridge, R., 51, 58
Langston, R., 94, 95, 97
Lansing, A. I., 489
Larner, J., 311
Larrabee, C., 172
Larsen, H., 7, 9
Larsen, P. O., 147
LaRue, C. D., 404, 406
Lascelles, J., 5
Laser, H., 181, 193
Laskaris, T., 534
Laskov, R., 60, 62
Laties, G. G., 456, 285, 399, 559, 562, 572
Laudi, G., 404, 412, 419, 432
Law, J. H., 242, 243, 258
Leaf, G., 123, 124, 132, 133
Leahy, J., 64
Lebedev, A. F., 3
Lebedev, G. V., 359
Leblond, C., 343, 344
Lechevallier, D., 305, 311
Lederer, E., 258, 548
Lederer, F., 317
Le Dizet, P., 310
Lee, A., 310
Lee, A. E., 547
Leech, J. H., 39, 51
Leech, R. M., 187, 192
Leech, W. D., 427
Lees, H., 202, 217, 219
Lees, M., 256
Lefort, M., 40, 41
Leggat, C. W., 456
Lehninger, A. L., 195, 251, 338, 339
Leinweber, C. L., 268, 269, 277, 280, 403
Leizorowitz, R., 444
Leloir, L. F., 306, 311
Lemoigne, M., 250
Lenkov, L., 438, 439
Lennarz, W. J., 234, 235
Leonard, E. O., 445
Leonard, E. R., 286, 502
Leone, E., 227, 228
Leopold, A. C., 404, 410, 419, 421, 422, 423, 424, 425, 426, 431, 432, 495, 501
Lepage, M., 33, 243, 248
Lerner, N. H., 185
Lester, R. L., 252, 258
Leuthardt, F., 135
Levari, R., 455, 456
Levedahl, B. H., 389, 393, 394
Levin, K., 114
Levine, S. S., 60
Levitt, J., 357
Levitt, L. S., 12
Lewin, L. M., 243
Lewis, C. M., 17
Lewis, S. M., 11
Liddle, A. M., 314
Lieberman, M., 269, 273, 274, 276, 289, 291, 292, 294, 295
Liesenkötter, I., 5
Lilleland, O., 92
Lindberg, B., 320, 321
Lindley, J., 500
Lindop, P. J., 491
Lindstrom, E. S., 11, 216
Lingle, J. C., 91
Lingrel, J. B., 52, 53
Link, G. K. K., 533, 535, 537, 544, 545, 552, 572
Linke, P., 132
Linko, P., 123, 454, 455, 456
Linkola, H., 114
Links, J., 18
Linsbauer, K., 520
Linschitz, H., 39
Lioret, C., 545, 548
Lipetz, J., 544, 545, 553
Lipmann, F., 5, 9, 53, 64, 134, 207, 215, 339
Lipp, A. E. G., 88
Lippincott, B. B., 15
Lipps, R. C., 122
Lipsky, S. R., 232
Liss, I., 133
Lister, G. R., 304
Litchtenstein, J., 55, 57, 59
Litt, M., 60
Littau, V. C., 33
Littauer, U. Z., 60, 61, 62, 64
Littlefield, J. W., 48, 53
Litzenberger, S. C., 566
Liu, W. C., 429
Liverman, J. L., 205, 207, 403, 421, 424, 467, 475, 478
Livingston, G. A., 277, 404, 410, 421, 422
Lizandr, A. A., 185
Ljungdahl, L., 156
Ljunggren, H., 111
Lloyd, F. E., 404, 405, 429, 430
Lockhart, J. A., 465, 479,

480, 496
Loeffler, J. E., 473
Loewus, F. A., 305, 329, 330, 331, 332, 333, 334, 337
Lofland, H. B., 238, 239
Loftfield, R. B., 46, 51, 52, 57
Logan, C., 256
Logan, M. A., 138
Lona, F., 439, 444, 479
Loneragan, J. F., 117, 118, 122
Longenecker, H. E., 332
Longman, K. A., 501, 502
Longmuir, I. S., 174, 177
Loos, G. M., 46, 363, 367
Lorch, E., 131, 227, 228
Losada, M., 7, 10, 11, 20, 151, 166, 167, 168
Lott, W. L., 85, 92, 93
Louden, J. C., 499
Louguet, P., 171
Lovern, J. A., 258
Lubell, A., 52, 69
Lubimeako, V. N., 342
Luckwill, L. C., 404, 410, 426, 428, 430
Lugo, H. L., 449
Luippold, M. J., 437, 441, 444, 446, 448
Luke, H. H., 566
Lumry, R., 251, 256
Lumsden, D. V., 276
Lund, H. A., 46, 51
Lundegårdh, H., 82, 84, 87, 95, 100, 101, 174, 190, 192
Lunt, O. R., 86, 101
Lustinec, J., 178
Lüttge, U., 140
Lüttgens, W., 3
Luzzati, V., 60, 61
Lynch, L. J., 279, 280, 282
Lynch, R. S., 403, 404, 410, 414, 420, 421, 422, 423, 430, 431, 432
Lynch, V. H., 164, 251
Lynen, F., 131, 211, 227, 228, 229, 230
Lyons, J. M., 268, 270, 281, 284, 285
Lyttleton, J. W., 32, 46, 48, 54, 55, 56, 57, 58

M

Maaloe, O., 51
McAlister, E. D., 524
MacArthur, M., 497
McAuliffe, C., 117
McCallum, A. H., 115
McCann, W. P., 251
McCarthy, B. J., 51, 58, 60, 61, 63, 66, 71
McClendon, J. F., 187
McClung, A. C., 92, 93
McCollum, J. P., 342
MacConnell, J. T., 115, 117, 123
McConnell, W. B., 240, 451
McCord, T. J., 135
McCorquodale, H., 311, 319, 451
McCoy, E., 109, 110, 111, 112, 113, 115, 122
McCready, C. C., 174
McDivitt, R. W., 232
Macdonald, I. R., 175, 178, 319
MacDougal, D. T., 266, 277, 278
McElroy, W. D., 210, 215, 217
McEwen, D. M., 554
McFadden, B. A., 5
McFall, E., 70
Macfarlane, M. G., 245
McGlasson, W. B., 268, 270, 280, 281, 282, 284, 285
McGregor, W. G., 231, 233
Machado, R. D., 51, 52
Machlin, L. J., 216
Maciejewska-Potapczyk, W., 547
Mack, W. B., 81, 277, 278, 282
Mackie, I. M., 316
Maclachlan, G. A., 307, 308
McLain, L. W., Jr., 229
Maclay, H. K., 15
McLean, J. D., 40
McLeish, J., 492
MacLeod, A. M., 311, 319, 451
McLeod, G. C., 39
MacMasters, M. M., 314
McMurtrey, J. E., Jr., 99
McNaughton, I. H., 438
MacQuarrie, I. G., 523
MacQuillan, A. M., 68
McQuillen, K., 46, 51, 52, 54, 56, 57, 58, 60, 62, 66, 68, 69
MacRobbie, E. A. C., 356, 362, 369, 390, 391, 393, 394, 395, 396, 397, 399
MacWilliam, I. C., 314, 370
Macy, P., 88
Maeda, A., 60, 62
Magaldi, A., 238
Magee, W. E., 120
Mager, J., 59, 216
Magistad, O. C., 366
Magnitski, K. P., 88
Maheshwari, N., 49
Mahler, H. R., 59
Mai, G., 403, 404, 405, 406, 419, 420, 421, 429, 430, 431, 433
Maier, U. P., 256
Maizel, J. W., 240
Major, R. T., 255
Makisumi, S., 144
Malabotti, A., 406, 421
Mall, L. P., 439
Malysheva, K. M., 185
Mandle, R. J., 535
Manigault, P., 547, 553
Manil, P., 116, 553
Mann, J., 359
Mann, P. J. G., 17
Manners, D. J., 314, 319
Mano, Y., 339
Mans, R. J., 64
Mansford, K., 132
Manske, R. H. F., 132
Manten, A., 18
Mapson, L. W., 329-50; 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 340, 341, 342, 344, 345, 346, 348, 457
Marcellin, P., 171
Marchal, E., 511
Marchini, P., 255
Marcus, A., 32, 450, 478
Margerie, C., 322
Margoliash, E., 60, 62
Marguilies, M., 220
Marikosky, Y., 60, 61
Marinetti, G. V., 244
Marks, J. D., 282, 453
Markus, K., 305
Marloth, R. H., 266
Marmur, J., 53
Maroti, M., 454
Marrè, E., 31, 32, 192
Marriman, H. J., 359
Marsh, C., 309
Marsh, H. V., 179
Marsh, P. B., 176
Marshall, M., 131
Marshaw, J. B., 229
Marsman, J. W., 38
Marth, P. C., 502
Martin, D. B., 226, 229
Martin, E. M., 53
Martin, J. H., 439
Martin, R. V., 304, 305, 307, 312
Maruo, B., 243, 244, 246, 247, 248, 257
Mason, A. C., 91, 95
Mason, D. D., 84
Mason, H. S., 234
Mason, S. G., 359
Massart, L., 447
Masuda, Y., 46
Mather, K., 513
Matsushita, S., 46, 57, 454
Matthaei, J. H., 69, 71, 72
Matthews, J. D., 500, 501
Maume, L., 84, 88
Maung, K., 314
Maurer, K. J., 499
Mauro, A., 354
Maw, G. A., 202

Maximov, N. A., 502
May, L. H., 304, 306, 313
Mayaudon, J., 155
Mayer, A., 174, 177, 304, 317
Mayer, A. M., 437-64; 32, 444, 445, 451, 455, 456, 457
Mayer, H., 234
Maynard, L., 342
Mayne, B., 165
Mazelis, M., 245
Mazurova, T. A., 456
Mead, J. F., 232, 235, 236
Mechalas, B. J., 211
Mecham, D. K., 256
Medina, A., 309
Meehan, F., 566
Mees, G. C., 361, 366
Meeuse, B. J. D., 316
Mego, J. L., 32
Mehvotra, B. D., 59
Meier, H., 320, 323
Meigh, D. F., 270, 274, 277, 291, 292, 294, 295
Meijer, G., 474
Melnick, J. L., 181
Mendicino, J., 307
Menke, G., 29, 37, 38
Menke, W., 27-44; 28, 29, 30, 33, 35, 36, 37, 38, 39, 40
Mennon, G. K. K., 227
Mercer, F., 28, 45, 51
Mercer, F. V., 40, 353, 363
Mergen, F., 498
Merrett, M. J., 570
Merrick, J. M., 251
Merrill, S., Jr., 96
Merry, J., 176
Mes, J. C., 231, 233
Meschia, G., 354
Meselson, M., 67, 69, 71
Messer, P. J., 275
Metcalf, J. C., 85
Metzenberg, R. L., 131
Metzner, H., 15
Meyer, B. S., 371
Meyer, D. R., 119, 122
Meyer, R. E., 95, 97
Meyer, S., 265
Meyer-Mevius, U., 132
Mian, A. J., 320
Michaelis, P., 498
Michener, H. D., 277, 278, 279
Michiels, L., 118
Michurin, I. V., 493, 498
Micke, A., 494
Micou, J., 65, 72
Middlebrook, G., 248
Middlebrook, W. R., 201
Middleton, J. T., 266
Miettinen, J. K., 132
Migita, K., 449
Mikhailova, E. S., 183
Mikhlin, D. N., 176
Milhaud, G., 5, 7, 181, 219
Miller, A., 48
Miller, C. O., 445, 478, 541
Miller, E. S., 231
Miller, E. V., 268, 269, 270, 275, 279, 280
Miller, J. H., 482
Miller, L. P., 268, 269, 270, 276, 279
Miller, P. M., 473, 482
Millerd, A., 559-74; 190, 457, 564, 565
Millet, J., 5, 7, 211, 213, 219
Mills, J. A., 364
Milner, M., 455, 456
Minmikawa, T., 206
Miramon, A., 235
Mirfaizov, Kh. M., 319
Mirov, N. T., 498
Mirsky, A. E., 48
Misra, U. K., 314
Mitchell, A. F., 500, 501
Mitchell, U. S., 502
Mitoma, C., 129, 240
Mitra, G. C., 522, 523
Mitrakos, K., 35
Mitsuhashi, S., 216
Mittenzwei, H., 2
Mix, M., 37
Miyamoto, T., 447
Miyano, M., 33
Mizuno, T., 319
Moat, A. G., 143
Möbius, M., 494
Mohr, H., 465-88; 441, 465, 466, 468, 469, 470, 472, 474, 475, 476, 479, 480, 481, 482, 483, 524, 527
Moldtmann, H. G., 342, 344
Molisch, H., 494
Mollenhauer, H. H., 39, 51
Möller, W., 62
Moltz, A., 337
Monk, G. S., 465
Monod, J., 70
Monselise, S. P., 46
Monzini, A., 331
Moon, H. H., 92, 93, 94
Moore, A. W., 122
Moore, G. W. E., 502
Moraw, R., 17
Morel, G., 144, 528
Moreland, D. E., 447
Morgan, K., 316
Moriyama, H., 256
Morley, F. H. W., 438, 438, 439
Morley, H. V., 2, 33
Morowitz, H. J., 51
Morris, A. J., 69
Morrison, T. M., 122
Morrow, I. B., 416
Mortimer, R. G., 120
Morton, R. K., 53, 310
Mosbach, E. H., 330, 332, 333, 337
Mosebach, G., 526
Moser, F., 342
Moses, V., 154, 183
Mosolova, I. M., 187, 191
Mosonyi, J., 332, 333
Mothes, K., 129-50; 33, 129, 139
Mouravieff, J., 475
Mourge, M., 144
Moustaffa, E. M., 457
Moutschen, J., 512
Moyse, A., 174, 175, 184
Mozingo, R., 144
Mueller, K. L., 242, 243
Mueller, R. T., 82, 91, 92, 94, 101
Mühlethaler, K., 39, 40, 312
Muir, R. M., 427, 431
Muir, W. H., 550
Mukherjee, B. D., 319, 320
Mulder, E. G., 110, 117, 121, 122
Muldrey, J. E., 226
Müller, A., 113
Müller, E., 138
Muller, F. M., 2
Müller, H., 545
Müller, K., 495
Mullins, L. J., 395
Mumma, R. O., 33, 243
Murakami, S., 37, 39
Murawski, H., 499
Murchio, J. C., 39
Murneek, A. E., 427
Murphy, H. C., 566
Murty, N. L., 235
Musulin, R. R., 332
Myers, A., 321
Myers, A. T., 91, 95, 97, 98
Myers, G. M. P., 357
Myers, J., 55, 67, 137, 160
Myers, R. M., 404, 406, 407, 419, 421, 429

N

Nâf, U., 507-32; 514, 515, 516, 517, 518, 519, 520, 521, 540, 543
Nagai, Y., 142, 211, 214, 215
Nagao, M., 442, 444
Nagy, R., 548
Nakagawa, A., 319
Nakamoto, T., 67, 70
Nakamura, H., 31, 33, 188
Nakamura, K., 496, 497
Nakamura, M., 315
Nakamura, T., 203
Nakatini, M., 331

Nakayama, S., 467
Nakayama, T., 242, 243
Nakazawa, D., 46
Nakazawa, S., 525
Nanda, K. K., 447
Nandi, D. L., 138, 453
Nanerjee, H. N., 266, 279
Naora, H., 33
Narasaki, T., 320
Narayanan, K. G. A., 145
Nasr, T., 501
Nasrallah, S., 92, 103
Nath, R., 240
Nathans, D., 64
Naughten, R. N., 256
Naumann, W. D., 91
Navashin, M., 493
Navazio, F., 217
Naylor, A. W., 129, 132, 133, 145
Naylor, J., 540, 543
Naylor, J. M., 438, 439, 446
Neal, G. E., 253, 456
Neary, G. J., 491
Neelin, E. M., 59
Neelin, J. M., 59
Neff, M. S., 89, 92, 95, 97
Negbi, M., 443
Negisi, K., 497
Nehring, K., 345
Neidle, A., 48
Neilands, J. B., 151, 153
Neish, A. C., 309, 545, 547, 548, 572
Nekrasova, T. U., 444
Neljubow, D., 265, 266, 267, 270, 282
Nelson, C. D., 304
Nelson, J., 528
Nelson, R. C., 267, 269, 270, 271, 278, 283, 285, 291
Nelson, S. H., 497
Nery, J. P., 85
Neubauer, M., 343
Neufeld, E. F., 308, 309
Neumann, G., 444, 445, 455
Newcomb, E. H., 46
Newmark, P., 48
Newton, J. W., 6, 11, 14
Nicholas, D. J. D., 83, 119
Nichols, C., 493
Nickerson, J. C., 421, 425
Nickerson, W. J., 270, 275
Nicolai, E., 321
Nicolaides, N., 226
Nicolson, A., 320
Niedergang-Kamien, E., 495
Niederl, J. B., 267, 268, 272
Niederpruem, D. J., 177, 193, 194, 196
Nieman, R. H., 30, 31, 188, 363, 365, 371
Nies, H., 403
Nigam, V. N., 310
Nightingale, G. T., 206, 345
Nijenhuis, L. E., 18
Nikuni, Z., 451
Nilan, R. A., 493
Nilsson-Ehle, H., 494
Nirenberg, M. W., 69, 71, 72
Nishimura, M., 31, 256
Nitsch, C., 426, 545
Nitsch, J. P., 426, 545
Niu, L. C., 551
Niu, M. C., 551
Noblé, A., 474
Noe, F. F., 454
Noguchi, I., 256
Nojima, S., 247
Nomura, M., 51, 69, 70, 71
Norberg, R. E., 15
Norcross, F. C., 51
Nord, F. F., 275, 282
Nordal, A., 319
Nordin, P., 314, 315
Norris, D. O., 115, 117, 118, 122
Norris, J. R., 118
Norris, K. H., 274, 291, 292, 294, 295, 466, 467
Norris, L., 132
Norris, P. S., 19
Norris, R. E., 132
North, C. P., 91, 92, 94, 101
Nour, M., 100
Novelli, G. D., 48, 64, 71
Novikoff, A. B., 45
Nozaki, M., 10, 11
Nutman, P. S., 109, 110, 111, 112, 113, 114, 115, 116, 117, 119

O

Oaks, A., 561, 565
Oaks, B. A., 5
Obata, Y., 316
O'Brien, J. S., 226
Ochoa, S., 4, 7, 151, 153, 227, 228
Oertli, J. J., 86
Ogandzhanyan, A. M., 323
Ogata, G., 368
Ogata, S., 7
Ogawara, K., 443, 444, 445, 447, 448, 449, 450
Ogina, C., 133
Oginsky, E. L., 138
O'hEocha, C., 33
Ohlenroth, C., 482
Ohmura, T., 172, 187, 191
Ohno, K., 247, 255
Oiseth, D., 319
Oka, H., 438
Okumura, F. S., 541
Oland, K., 133, 144
Olavarria, J. M., 311
Olcott, H. S., 256
Olden, E. J., 497
Ollagnier, M., 82, 85, 87, 88, 89, 90, 95, 96, 99, 101, 102
Olmstead, A. J., 267, 268, 271, 279, 280, 282, 283, 284, 285, 288, 289, 294
Olney, H. O., 437, 440
Olsen, C., 95, 100
Olsen, R. A., 206
Olson, E. O., 91, 92
Olson, J., 442, 443
Olson, J. M., 13, 16
Olson, R. A., 37
Omura, H., 146
Onal, M., 373
Ono, K., 443, 444, 445, 447, 448, 449, 450
Oota, Y., 46, 60, 62, 451, 452, 453, 454, 456
Oppenheimer, H. R., 93
Oppenheimer, J. R., 19
Orcharov, K. E., 343
Ordin, L., 352, 358, 360
Ordögh, F., 116
Organ, J. G., 342
Orth, R., 523
Osajima, Y., 146
Osawa, S., 46, 49, 60, 62, 451, 452, 453, 454, 482, 530
Osborne, D. J., 404, 408, 420, 421, 422, 423, 425, 431
Osteux, R., 144
Ota, T., 449
Otaka, E., 60, 62
Ottesen, M., 188
Ottestad, E., 319
Ouellet, C., 164
Ovenden, S. L., 304
Overholser, E. L., 266
Owen, P. C., 570, 571
Ozaki, K., 99
Ozanne, P. G., 96

P

Pack, R. L., 144
Pain, R. H., 60
Painter, E. P., 232
Palade, G. E., 35, 45, 47, 51, 52, 53, 56, 240
Paleg, L. G., 315, 452, 453
Paletta, B., 28
Pangborn, J., 313
Pappenheimer, J. R., 355, 356
Paquin, R., 566
Parchwitz, H. K., 545
Pardee, A. B., 16, 70
Parija, P., 290

Park, R. B., 32, 38
Parker, C. A., 114, 115, 120, 121, 122
Parker, E. R., 89, 103, 345
Parker, M. W., 465, 466, 473, 524
Partanen, C. R., 528, 529
Partlow, E. V., 320
Passecker, F., 499
Passoneau, J. V., 15
Patau, K., 540, 543
Patchett, A. A., 145
Pate, J. S., 109, 114, 119, 122
Patlak, C. S., 385
Paulin, A., 280, 288
Paulus, H., 242, 244
Pavlinova, O. A., 305
Payne, P., 136
Pazur, J. H., 563, 565
Pearson, H. E., 103
Pearson, P. B., 216
Peat, S., 316
Péaud-Lenoel, C., 322
Peck, H. D., 212, 213, 219, 220, 221
Peel, A. J., 304
Peel, E. W., 144
Peers, F. G., 455
Pengra, R. M., 122
Pennell, G. A., 367
Percival, E., 316
Perez-Milan, H., 206
Perner, E., 29
Perry, R. P., 65, 72
Petek, F., 310
Peterkofsky, A., 5, 32, 154, 159, 160, 161, 166, 167
Petermann, M. L., 48, 51, 53, 54, 55, 56, 57, 58, 59, 63
Peters, E., 475, 481
Peters, R. A., 232
Peters, T., Jr., 56
Peterson, C. E., 277, 296
Peterson, J. W., 232
Peterson, W. H., 216, 548
Petinov, N. S., 185
Peto, F. H., 493
Petrochenko, E. I., 186
Peyser, P., 337
Pfaff, C., 345
Pfeiffer, C. C., 239
Pfeil, E., 547, 548
Pfutzer, G., 345
Philip, J. R., 351, 352, 353, 362, 366
Phillips, A. H., 258
Phillips, C., 274
Phillips, T. G., 319
Phinney, B. O., 444, 479, 480, 501
Pichler, I., 470, 472
Pickels, E. G., 53
Pierce, G. B., Jr., 551
Pierpoint, W. S., 191
Piette, L. H., 39
Pilhorm, H. R., 53
Pinsky, M. J., 11
Pinus, E. A., 181
Piper, S. H., 255
Pirie, N. W., 32
Pirson, A., 17, 96, 482
Pittendrigh, C. S., 441
Pizer, F. L., 243
Pizer, L. I., 243
Plaisted, P. H., 143
Plantefol, L., 174
Platt, R. S., Jr., 544
Plessers, A. G., 231, 233
Pocchiari, F., 308
Pogo, A. O., 33
Pokorna, V., 178
Polissar, M. J., 383, 384
Poljakoff-Mayber, A., 437-64; 444, 445, 451, 453, 455, 456, 457
Pollard, A., 255
Pollard, J. K., 121, 129, 145
Pollock, B. M., 437, 440
Pollock, J. R. A., 439, 447, 448, 452
Polonsky, J., 548
Pommer, E., 345
Pommer, E. H., 123
Pon, N. G., 32, 38, 153, 154
Pontelev, A. N., 456
Pontremoli, S., 156
Pope, M. N., 438
Popenoe, J., 92, 93, 95
Popoff, A., 439
Porra, R. J., 114
Porritt, S. W., 265, 286
Porter, C. A., 570
Porter, D. R., 343
Porter, H. K., 303-28; 179, 180, 304, 305, 306, 307, 308, 312, 317
Porter, J. W., 226
Porter, K. R., 51, 52
Portheim, L., 421, 424, 430
Porto, F., 445, 492
Postgate, J. R., 202, 211, 212, 214
Potter, G. F., 85, 87, 95, 96, 97
Potter, N. A., 280
Pover, W. F. R., 238
Povolotsckaya, K. L., 344
Powell, L. E., Jr., 426
Powell, R. D., 475, 478
Power, M., 92
Pozsár, B. I., 562
Pratt, C., 426
Pratt, H. K., 267, 268, 269, 270, 272, 273, 275, 276, 277, 380, 281, 282, 283, 284, 285, 414
Preiss, J. W., 448
Prescott, D. M., 65, 72, 354
Prescott, J. M., 145
Prestidge, L. S., 70
Preston, R. D., 321, 322, 323
Prevot, P., 81, 82, 84, 85, 87, 88, 89, 90, 95, 96, 99, 101, 102
Price, L., 475
Pricer, W. E., Jr., 245
Pridham, A. M. S., 277
Pridham, J. B., 310, 311, 317, 319
Pringle, R. B., 514, 566
Pringsheim, E. G., 522
Pringsheim, O., 522
Proctor, M. H., 9
Proebsting, E. L., Jr., 90, 101, 103
Prokoshev, S. M., 266, 268
Prosser, M. V., 337
Prusakova, L. D., 185
Przybylska, J., 133, 145
Pubols, M. H., 305
Purchase, H. F., 110
Purves, W. K., 468, 561

Q

Quackenbush, F. W., 232
Quispel, A., 110, 123

R

Raacke, I. D., 32, 46, 50, 64
Rabinowicz, M., 344
Rabinowitch, E. I., 10, 19, 151, 256, 257, 468
Rabson, R., 48
Rack, K., 550
Racker, E., 5, 32, 151, 153, 154, 155, 156, 157, 159, 160, 161, 165, 166, 167, 231
Racusen, D. W., 134
Radhakrishnamurthy, B., 320
Radionova, N. A., 453
Radley, M., 315
Rafatti, E., 93
Ragetli, H. W. J., 571
Raggio, M., 109-28; 110, 116, 117, 119, 120
Raggio, N., 109-28; 110, 116, 117, 119, 120
Ragland, J. B., 205, 207, 215
Ragland, T. E., 192
Ralston, R. A., 494
Ramasarma, T., 238, 240
Ramig, R. E., 92
Ramirez, J., 15
Randall, M., 3
Raney, F. C., 351, 360

Ranjan, S., 279
Rao, N. A., 454
Raper, R., 132
Rappaport, L., 502
Rasch, E., 537, 538, 539, 552, 553
Rasmussen, G. K., 87, 91, 92, 93, 95, 97, 98, 100
Rathje, W., 305
Ratner, S., 145
Ratsimamanga, R., 344
Ratsimamanga, W., 343
Rautanen, N., 206
Ravel, J. M., 135
Rawlinson, W. A., 310
Ray, P. M., 351, 354, 356, 362, 375, 501
Ray, S. N., 343
Raymond, J. C., 119
Rayroud, A., 251
Recaldin, D. A. C. L., 318
Redfearn, E. R., 251
Redstock, T. L., 46
Reece, P. C., 276, 498, 499
Reed, L., 202
Rees, A. R., 440
Regeimbal, L. O., 92, 93, 94, 282
Reichard, P., 130, 131
Reichenthal, J., 332, 337
Reichstein, T., 331
Reid, M. E., 342, 344, 347
Reifer, I., 134
Reinbothe, H., 129-50; 130, 135, 140, 141
Reinert, J., 481
Reis, P. J., 49
Reisenauer, H. M., 118
Reiser, R., 235
Reitz, H. J., 93, 95, 97
Rembold, H., 254
Rendi, R., 49
Renner, O., 502
Rennie, S. D., 240
Resühr, B., 442
Reuter, G., 129, 132, 134, 146
Reuther, W., 81, 82, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 100, 101, 102, 103
Reynolds, T., 305
Rho, J. H., 49, 132, 134
Rhoades, H. F., 122
Rice, B., 192, 195
Rich, A., 46, 54, 60
Richards, H. M., 266, 277, 278
Richards, L. A., 366, 368
Richards, S. J., 100
Richardson, D. A., 117
Richardson, K. E., 160, 165
Richter, G., 154, 160
Rideal, E., 396
Ridyard, J. N. A., 234
Rier, J. P., Jr., 555
Riggio-Bevilacqua, L. see Bevilacqua, L. R.
Righter, F. I., 498
Riker, A. J., 545, 546, 547, 548, 550, 552
Riley, M., 70
Rimon, D., 450, 451
Ringelmann, E., 131, 227, 228
Rinne, R. W., 94
Ris, H., 35
Risebrough, R. W., 69, 71
Rittenberg, D., 229, 232
Rittenberg, S. C., 211
Ritter, C. M., 87
Robbins, P. W., 202, 207, 210, 215, 216
Robbins, W. J., 494, 502
Robbins, W. R., 206
Roberts, A. N., 99, 101
Roberts, D. W. A., 277
Roberts, E. R., 120
Roberts, J. B., 250
Roberts, R. B., 46, 47, 48, 51, 52, 57, 58, 66, 68, 71, 204
Robertson, R. M., 294
Robertson, R. N., 282, 362, 386
Robinson, E., 46, 305
Robison, M. M., 545
Robson, H. H., 545, 555
Roche, J., 129
Rochovansky, O., 145
Rodrigues, A. R., 276
Roepke, R. R., 203
Rogers, B. J., 316
Rogers, B. L., 82, 84, 90, 93, 94, 95
Rogers, W. S., 498
Rohmeder, E., 494, 497
Rohrbaugh, P. W., 270, 289
Rohrlich, M., 317
Rojas-Garciduenas, M., 439
Rollin, P., 439, 440, 443, 445, 449
Romanko, R. R., 567
Roodyn, D. B., 49
Rorem, E. S., 315
Rosa, J. T., 266, 282
Rose, R. C., 265, 266, 270, 277, 282
Rosen, W. G., 35
Rosenberg, A. J., 171-200; 175, 176, 177, 179, 180, 181, 186, 187
Rosenberg, L. L., 167
Ross, A. F., 277
Rossetter, F. N., 404, 408, 410, 411, 412, 413, 421
Rossi, G., 32
Rossiter, R. J., 258
Rotblat, J., 491
Rothstein, A., 172
Roudier, A., 320
Rouser, G., 226
Routley, D. G., 319
Rovira, A. D., 109
Rowan, K. S., 280, 282, 308, 309
Roy, A., 202, 207, 215
Roy, W. R., 96, 98
Ruben, S., 3, 5
Rubin, B. A., 190, 569, 570
Rubin, J., 10
Rubin, M. A., 491
Rudin, P. E., 110
Rudney, H., 252
Rudolf, P. O., 494
Rüegg, R., 251
Ruge, U., 279, 478
Ruhland, W., 28, 171, 351
Rumberg, B., 17
Rumberg, J., 526
Runeckles, V. C., 179, 180
Rusnyak, I., 282
Russell, R. S., 100, 351, 361, 363, 365
Russell, W. L., 491
Ryter, A., 51

S

Sablova, G. A., 456
Sacher, G. A., 491
Sadler, W. R., 10
Sager, R., 35
Sahai, P. N., 255
Sakai, R., 568, 570
Sakaki, T., 46, 482, 530
Sakov, N. E., 181
Sale, P. J. M., 474, 480
Salisbury, F. B., 46
Sallach, H. J., 146
Saltman, P., 309
Samborski, D. J., 303, 560, 561, 562, 563, 564, 565
Sampson, H. C., 404, 405, 407
Samuel, E. W., 363, 367, 500
Sanada, J. C., 212
San Clemente, C. L., 117
Sander, C., 60, 63, 540, 543
Sands, M. K., 204
San Pietro, A., 4, 31
Santer, M., 5, 217, 218, 220
Sanwal, B. D., 566, 570
Sarma, P. S., 345, 347, 453
Sato, C. S., 49, 56, 65, 66
Sato, K., 91, 92, 303, 313
Sato, R., 203
Sato, T., 497
Sauter, M., 55
Sax, H. J., 494
Sax, K., 489-506; 494, 499, 500, 503
Sayre, R. M., 563, 565

Scarisbrick, R., 3, 14, 191
Scarth, G. W., 357
Schachman, H. K., 16, 47, 48, 51, 56, 57, 58, 63
Schaefer, W. B., 248
Schaeffer, P., 513
Schaffalitzky, de Muckadell M., 496, 497, 498, 502
Scheffer, R. P., 566, 570
Scher, S., 9
Schermerhorn, L. G., 206
Schiff, J. A., 201, 202, 215, 217
Schlenk, F., 202
Schlenk, H., 226
Schlessinger, D., 56, 57, 58, 60, 63, 71
Schlossmann, K., 211
Schlubach, H. H., 316, 317
Schmid, C., 195, 226, 230
Schmidt, G., 247
Schmidt, G. C., 138
Schmidt, W., 480
Schmidt, W. A. K., 546
Schnabel, M., 132, 139, 145
Schneider, E., 2
Schneider, E. J., 545
Schneider, K. C., 120, 121
Schneiderman, H. A., 196
Schnepf, E., 39, 40
Schoeller, W., 272
Schoenheimer, R., 232
Scholfield, C. R., 226
Schollmeyer, P., 196
Schormuller, J., 455
Schoser, G., 465
Schou, L., 164, 165
Schrauth, W., 272
Schroeder, E. A., 155, 159
Schroeder, E. M., 437, 439, 440, 448
Schroeder, R. A., 345
Schulenberg, S., 332, 337
Schwartz, W., 202
Schwarz, K., 545
Schweet, R. S., 57, 64, 69
Schweiter, U., 251
Schweizer, J., 511
Schwimmer, S., 315
Scott, K. J., 559-74; 564, 565, 572
Scott, L. E., 92, 93, 95
Scott, R. A., 478
Scotti, R., 454
Scudder, G. K., Jr., 94
Scully, N. J., 465, 473
Scurfield, G., 502
Šebesta, K., 454
Séchaud, J., 51
Seegmiller, C. G., 329, 331, 333
Seifriz, U., 275
Seigel, S. M., 492
Sekine, T., 138
Sekora, A., 28
Selby, K., 323
Sell, H. M., 46
Semenenko, G. I., 143, 454
Sen, S. P., 46, 207
Senez, J. C., 202, 217
Servettaz, O., 31, 192
Setnikar, I., 354
Setterfield, G., 46, 51, 59, 323, 324
Seubert, W., 230
Severina, I. S., 136
Shaeltiel, M., 196
Shafizadeh, F., 307
Shannon, L. M., 84, 91
Shantz, E. M., 140
Shapiro, S. K., 202
Sharp, C. W., 59
Sharples, G. C., 103
Shatkin, A. J., 35, 48
Shatz, S. N., 279
Shaulis, N., 85
Shaulis, N. J., 426
Shaw, F. H., 275
Shaw, M., 303, 560, 561, 562, 563, 564, 565
Shaw, T. I., 386, 393
Shear, C. B., 87, 88, 89, 91, 95, 97, 98
Shear, G. M., 93
Shearer, G. B., 53
Shen, K. M., 304, 305
Shen, Y. K., 304, 305
Shepherd, A. D., 275
Shepherd, C. J., 203, 215
Shepherd, H., 319
Shereverya, N. I., 96
Sherwood, H., 15
Shibaoka, H., 481
Shibko, S. I., 305, 307, 452
Shibuya, I., 33
Shield, J. A., Jr., 404, 408, 410, 420
Shigeura, H. T., 56
Shimazono, N., 339
Shiraki, M., 212, 214, 215
Shiroya, M., 304
Shishko, A. M., 322
Shive, W., 135, 445, 478
Shoji, K., 421, 422, 423, 424
Shorrocks, V. M., 365
Shotlander, V. L., 246
Shropshire, W., 468, 481, 483
Shunk, C. H., 35, 251
Sibatoni, A., 72
Sideris, C. P., 96
Siegel, M., 445
Siegelman, H. W., 466, 467, 468, 470, 473
Siegesmund, K. A., 35
Siekevitz, P., 52, 53, 56, 59
Sievers, A., 475
Sievers, A. F., 266
Sik, T., 116
Silberman, R., 256
Simakova, I. M., 257
Simkin, J. L., 46, 51
Simmons, R. O., 232
Simpson, G. M., 446
Sims, R. P. A., 231, 233
Simson, P., 54, 59
Simura, K., 72
Singer, B. A., 46, 53
Singh, R. N., 35
Sircar, S. M., 447
Sironval, C., 120
Sisakyan, N. M., 181, 183, 186, 187, 191, 231, 257, 454
Sisler, E. C., 477
Sissins, M. E., 18
Sistrom, W. R., 16, 20
Sites, J. W., 85, 90, 93, 95, 100, 101
Sitte, P., 51
Sitton, B. G., 85, 89
Sivaramakrishan, V. M., 453
Sivarama Sastry, K., 345, 347
Sjodin, R. A., 388, 398
Sjöstrand, F. S., 28, 50, 52
Skews, S. J., 307, 452
Skilna, L., 55
Skinner, C. G., 135, 445, 478, 522
Skoog, F., 46, 118, 539, 540, 541, 543
Skrigan, A. I., 322
Slade, H. D., 138
Slamp, W. C., 138
Slater, W. G., 88
Slaton, W. H., Jr., 235
Slatyer, R. O., 351-78; 351, 362, 363, 364, 365, 366, 367, 368, 370, 372, 373, 374, 375
Slayer, H. S., 63
Sluyser, M., 64
Smeets, L., 502
Smillie, R. M., 31, 32, 33, 154, 155, 159, 187, 191
Smirnov, A. M., 343
Smirnov, B. P., 231
Smith, A. M., 342
Smith, C. T., 93
Smith, D. C., 32, 132
Smith, D. E., 444, 445
Smith, D. L., 497
Smith, E. L., 256
Smith, F. G., 457
Smith, F. W., 95, 97
Smith, H. W., 266, 282, 285
Smith, J. H. C., 2, 473
Smith, L., 14, 15, 191, 446, 457
Smith, L. H., 139, 143
Smith, M., 135, 136
Smith, M. C., 345
Smith, P. F., 81-108; 82, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 103, 138

Smock, R. M., 267, 273, 275, 280, 283
Smyrniotis, P. Z., 157
Snell, E. E., 145, 146
Snow, A. G., Jr., 443
Sobotka, H., 53
Söding, H., 445
Sogo, P. B., 15
Soldatenkov, S. V., 266, 456
Solomon, A. K., 354, 358, 390, 392, 395, 397
Solov'ev, V. P., 439
Sols, A., 309
Solymosy, F., 571
Somers, G. F., 342, 343
Søndergaard, E., 35
Sorber, D. G., 280
Šorm, F., 454
Šormová, Z., 454
Southwick, F. W., 92, 95, 267
Spanner, D. C., 368
Sparrow, A. H., 283, 503
Spath, J. L., 265
Specht, A. W., 82, 85, 86, 87, 90, 91, 92, 93, 95, 96, 97, 98, 103
Spector, L., 131
Spencer, B., 215, 217
Spencer, J. L., 503
Spencer, M. S., 272, 273, 282, 283, 285, 288, 294
Spencer, W. W., 312
Spicher, G., 113
Spiegel, H. E., 243
Spiegelman, S., 68, 69, 70, 71
Spiekermann, R., 33
Spikes, J. D., 251, 256
Spragg, S. R., 455, 456
Springer, E., 507, 509, 522
Sprouston, T., 255
Spurný, M., 448
Spurr, H. W., Jr., 547
Spurr, R. A., 269, 273, 276, 289
Squires, C. L., 207, 226, 230
Squires, R., 53, 56, 57, 60, 69
Squires, R. M., 273
Srb, A. M., 133, 145
Srere, P. A., 157
Srinivasan, V. R., 320
Stacey, B., 319
Stacey, M., 115
Stafford, H. A., 53, 238
Stahmann, M. A., 568, 570
Stalder, L., 119
Stamm, D., 254
Stanacev, N. Z., 247
Stange, L., 525
Stanier, R. Y., 2, 8, 10, 16, 18, 20, 21, 250
Stanton, T. R., 439
Stapp, C., 113, 533, 547, 548
Stearns, F., 442, 443
Steckel, J. E., 92, 95
Steenbjerg, F., 88
Steers, E., 140
Steeves, T. A., 511, 528, 529
Steffen, K., 41
Steinbach, K. J., 310
Steinbauer, G. P., 439, 440, 449, 492
Steinberg, G., 232, 235
Steiner, M., 137
Steiner, R. F., 61
Steinman, E., 28
Steinmetz, E., 278
Stenlid, G., 176, 185
Stepanenko, B. N., 319
Stepanov, B. I., 322
Stephens, A. M., 320
Stephenson, M., 211
Stephenson, M. L., 32, 49
Stepka, W., 164
Sterling, C., 313
Stern, B. K., 165
Stern, H., 51, 538, 553
Stern, J. R., 227
Stern, K. G., 181
Stetten, D., Jr., 232
Stevens, A., 70
Stevens, C. M., 217
Stevenson, G., 124
Steward, C. M., 316
Steward, F. C., 121, 129, 140, 145, 171, 351, 539
Steyn, W. J. A., 85
Stickland, L. H., 211
Stiles, I. E., 447
Stiles, W., 559
Stiller, M., 151-70
Stitt, F., 273
Stocking, C. R., 33, 188, 352, 356, 357, 368, 372, 375
Stokes, P., 437, 440
Stoll, C., 553
Stolwijk, J. A. J., 273
Stone, E. C., 440
Stonier, T., 533, 534, 537, 552, 554, 555
Stotz, E., 244
Stout, P. R., 96
Stoutemyer, V. T., 497
Stowe, B. B., 255, 444
Strauss, G., 147
Street, H. E., 305
Strepkov, S. M., 317
Strickland, E. H., 33, 245
Strickland, K. P., 258
Strode, C., 53
Strong, F. M., 541
Strugger, S., 39, 40, 360
Stubbe, H., 493
Stumpf, P. K., 46, 151, 153, 225, 226, 230, 235, 236, 245, 252, 253, 450, 452, 456
Sturck, R., 69, 70
Sturgeon, R. J., 320
Su, J. G., 309
Sudduth, H. C., 251
Sugahara, K., 33
Sullivan, J. T., 319
Sullivan, M., 139, 143
Sunderland, N., 447
Sunobe, Y., 456
Surrey, K., 477
Sussex, I. M., 528, 529
Sutcliff, J. E., 46
Suzuki, I., 5, 218
Suzuki, K., 339
Suzuki, N., 569, 570
Swets, W. A., 421, 423
Swift, H., 537, 538, 539, 552, 553
Switzer, C. M., 457
Sykes, J., 51
Szalai, I., 447
Szarkowski, J. W., 33
Szende, K., 116
Szent-Gyorgyi, A. G., 201
Szilard, L., 490
Szymona, M., 160

T

Tagawa, K., 10, 11
Tager, J. M., 206
Takahashi, J., 305, 319
Takahashi, N., 438, 439
Takakuwa, M., 568, 570
Takamatsu, K., 31, 256
Takamiya, A., 31
Takanami, M., 52, 53, 56, 60, 62, 64
Takase, N., 568, 570
Takashima, S., 256
Takata, K., 46, 49, 454
Takebe, I., 217
Takenaga, S., 451
Takita, S., 568
Talbert, F. D., 445
Tamaoki, T., 546
Tamiya, H., 31
Tanada, T., 46
Tanaka, A., 304
Tanaka, T., 442, 444
Tang, W. T., 438
Tang, Y. W., 544
Tanner, H. A., 17
Tanret, G., 144
Tappel, A. L., 256
Tarantola, C., 453
Tatum, E. F., 48
Taubert, H., 123
Taufel, K., 310
Taussig, A., 135
Taylor, G. A., 97
Taylor, K. N., 421, 425
Taylor, S. A., 372, 374
Taylor, T. I., 273
Tazakawa, Y., 453
Tazawa, M., 46, 358
Tecce, G., 48
Teis, R. V., 3

Teller, D. C., 55
Tenenbaum, I. L., 543
Teorell, T., 379, 382, 383, 384
Ter-Kerapetyan, M. A., 323
Terpstra, W., 403, 404, 414, 419, 428, 432
Thaine, R., 304
Thalacker, R., 29
Thannhauser, S. J., 247
Thatcher, F. S., 561
Theorell, H., 190
Therman, E., 538
Thiele, R., 466
Thiers, R. E., 55
Thimann, K. V., 4, 32, 46, 49, 177, 196, 273, 274, 278, 283, 287, 288, 289, 290, 291, 292, 293, 296, 297, 363, 367, 408, 445, 481, 497, 523
Thomas, A. J., 552, 553
Thomas, J. B., 18, 32, 38, 468
Thomas, M., 211
Thomas, M. D., 202, 205, 206
Thomas, W., 81, 88
Thompson, A. H., 93
Thompson, H. C., 501
Thompson, J. A., 122
Thompson, N. S., 320
Thompson, R. C., 439
Thomson, B. F., 473
Thomson, J., 313
Thornburg, L., 313
Thorne, G. N., 304
Thornton, H. G., 110, 111, 112, 113, 115, 117
Thornton, N. C., 437, 439, 440, 446, 448, 449
Thresher, C. L., 305
Throneberry, G. O., 191
Tietz, A., 226
Tietz, N., 451
Tiffin, L. O., 96
Tikalsskaia, V. V., 342
Timasheff, S. N., 60, 61, 62
Timell, T. E., 320
Tinoco, I., 60
Tipton, C. L., 247
Tisdale, H. D., 256
Tissières, A., 56, 57, 58, 71, 179
Titchner, E. B., 226
Titus, E., 243
Titus, J. S., 82
Tjensvold, A. H., 273
Todd, A. R., 46
Tognoli, L., 192
Tolbert, N. E., 160, 164, 165, 176, 240, 277, 296, 441, 445, 478
Tollin, G., 15
Tolmach, L. J., 4
Tomimatsu, Y., 273
Tomiyama, K., 568, 570
Tomiyama, T., 144
Tomizawa, H. H., 242, 243
Tomoeda, M., 316
Ton, P. C., 269, 272, 275, 295, 296
Toole, E. H., 437, 438, 439, 440, 441, 443, 446, 448, 466, 467, 469, 474, 524
Toole, V. K., 437, 438, 439, 440, 441, 443, 444, 445, 466, 467, 469, 474, 524
Torrey, J. G., 110, 116, 117, 120
Tosdii, G., 48
Touffet, J., 142
Tove, S. R., 11
Towers, G. H. N., 140, 141
Townsend, J., 15
Toyama, S., 305
Toyoda, S., 569, 570
Tracey, M. V., 129, 139
Trainina, F. L., 275
Trams, E. G., 229
Traub, H. P., 276
Travis, D. C., 451
Trebst, A. V., 6, 7, 30, 151, 166, 167, 168
Trenner, N. R., 35, 251
Truchelot, G. B., 268, 269, 272, 277, 280
Trudinger, P. A., 5, 7, 218, 219, 220
True, R. H., 266, 522
Trueblood, K. N., 61
Trurnit, H. J., 38, 258
Tsao, T., 547
Tschiersch, B., 144, 145
Ts'o, P. O. P., 45-80; 32, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 63, 65, 66, 69
Tso, T. C., 99
Tsui, C., 541
Tsujimoto, H. Y., 6, 20
Tua, C., 192
Tukey, H. B., 101
Tukey, H. B., Jr., 101
Tulecke, W., 145
Tully, R. H., 332
Turian, G., 483
Turk, A., 273, 275
Turkina, M. V., 305
Turkova, N., 278
Turner, B. L., 144
Turner, D. H., 142, 309
Turner, J. F., 142, 309, 456
Turner, J. S., 181, 304
Turner, N. C., 273
Turvey, J. R., 316
Tuttle, L. C., 339
Tyler, K. B., 100
Tyminski, A., 320
Tytell, A. A., 138

U

Udenfriend, S., 129, 238, 239
Ueda, R., 37, 39, 312
Ulmann, M., 314
Ulrich, A., 81, 83, 85, 88, 90, 101, 103
Ulrich, R., 265, 280, 288
Umbreit, W. W., 6, 219, 455
Umemura, Y., 568
Umrath, K., 391
Uota, M., 268, 272, 280, 287
Upton, A. C., 491
Urbach, F., 275
Uribe-Arango, H., 117
Uritani, I., 457, 559, 568, 570
Ussing, H. H., 354, 379, 381, 384, 387, 394

V

Vaadia, Y., 351
Vaartaja, O., 442, 443
Vacha, G. A., 277, 279, 282
Vagelos, P. R., 226, 229
Valentine, R. C., 139, 144, 146
Vallee, B. L., 55
van Baalen, J., 226
Vandecaveye, S. C., 92
van den Honert, T. H., 351, 356, 361, 362
Vandenriesche, L., 143
van der Laan, P. A., 277, 278
van der Laan, P. J., 331
Van Eekelen, M., 331
Van Horn, C. W., 345
van Niel, C. B., 1-26; 2, 4, 7, 8, 9, 12, 14, 18, 201
Van Noort, G., 153
Van Overbeek, J., 500
Van Steveninck, R. F. M., 426, 428
van Sumere, C. F., 447
van Thoai, N., 129, 144
van Veen, W. L., 110, 117, 121, 122
Varga, M., 438, 447
Varner, J. E., 265, 282, 286, 453
Vartapetyan, B. B., 359, 361
Vasil'eva, E. M., 321
Vasil'eva, N. A., 454
Vasil'eva, N. G., 359, 360
Vatter, A. E., 35, 46, 51, 554

Vazart, J., 511
Velasco, J., 450
Vendrig, J. C., 403, 404, 414, 418, 419, 420, 424, 427, 428, 430, 432
Venecto, S., 453
Vennesland, B., 30, 31, 33, 165, 188, 238
Vereshchagin, A. G., 450
Verleur, J. D., 567, 570
Verlinden, J. P., 120
Verna, G. S., 279
Vernon, L. P., 14
Veselkine, N. V., 342
Veselov, I. Y., 275
Villar-Palasi, C., 311
Villegas, R. T., 354, 358
Villeret, S., 142
Villiers, T. A., 440, 447
Vince, D., 474, 480
Vincent, D. L., 319
Vincent, J. M., 112, 115, 118, 122
Vinograd, J., 46, 47, 48, 50, 51, 53, 55, 56, 57, 58, 59, 60, 63
Vinogradov, A. P., 3
Vintikā, J., 114
Virgin, H. I., 352, 475, 524
Virtanen, A. I., 113, 114, 132, 453
Vishniac, W., 4, 5, 7, 151, 155, 160, 217, 218
Visser, T., 439
Vlamis, J., 96
Vlitos, A. J., 255
Vogel, A., 39
Vogel, E., 310
Vogel, H. H., Jr., 544
Vogel, H. J., 211
Vogele, A. C., 280, 287
Vogler, K. G., 6, 219
Vohra, P., 217
Völker, W., 165
Volkin, E., 69
VonAbrams, G. J., 439
von Bredow, K., 444
von der Decken, A., 54, 64
von Ehrenstein, G., 53, 64
von Guttenberg, H., 277, 278
Von Maltzahn, K. E., 523
von Saltza, M. H., 541
von Wettstein, D., 527
von Wettstein, F., 507, 509, 522
Vosburgh, G. J., 354
Voskresenskaya, N. P., 182
Voss, D. O., 190

W

Wachter, W., 270
Wacker, W. E. C., 55
Wackholder, K., 345
Wada, K., 568
Wada, M., 132
Wadkins, C. L., 195
Wadleigh, C. E., 366
Waelsch, H., 48
Wagenknecht, A. C., 243
Waggoner, P. E., 270, 275, 294
Wagner, H., 232, 234
Wagner, M., 445
Wainwright, T., 210
Wakil, S. J., 226, 227, 228, 229, 230, 258
Walker, J. B., 137, 145
Walker, J. C., 568, 570
Walker, N. A., 388, 389, 390, 393, 395, 396, 397, 398, 400
Wallace, A., 82, 86, 91, 92, 93, 94, 97, 101
Wallace, J. M., 53, 54, 55, 56, 57, 60, 69
Wallace, R. H., 438
Wallace, T., 81, 84, 102, 345
Waller, J. P., 59, 60
Wallihan, E. F., 95
Walls, L. P., 267
Walter, F., 41
Walter, H., 366
Wander, I. W., 95, 100, 101
Wandewalle, G., 359, 360
Wang, D., 146
Wang, S. H., 296
Wang, T. Y., 48, 49
Wanner, H., 304
Warburg, O., 3, 165, 172, 174, 193
Ward, M., 509, 528
Ward, P. F. V., 232
Wardlaw, C. W., 286
Wareing, P. F., 439, 440, 442, 443, 446, 447, 449, 501, 502, 522
Warner, R. C., 49
Warner, R. M., 90, 103
Warren, G. F., 95, 97
Warren, W., 68
Warrington, P. M., 181
Wartiovarra, V., 358
Washburn, R., 345
Wassink, E. C., 9, 20, 474
Watertor, J. L., 545
Watson, J. D., 46, 51, 56, 57, 58, 69, 71
Waygood, E. R., 32, 566
Weatherby, R. T., 93
Weatherley, P. E., 304, 360, 361, 362, 366, 367, 369
Webb, D. A., 495
Webb, E. C., 153
Webber, J. M., 307
Weber, E. J., 242
Weber, P., 28, 29
Weber, R., 188
Webster, G., 46, 52, 53, 187, 194
Wedding, R. T., 215
Weeks, W. D., 92, 95, 103
Wehrung, M., 470
Weichkers, J., 275
Weidmann, S., 395
Weigel, H., 310
Weigl, J. W., 19, 181
Weinhold, A., 81
Weintraub, M., 571
Weintraub, R. L., 343, 421, 425
Weir, J. B., 118, 119
Weis, D., 182
Weiss, H., 243
Weiss, S. B., 67, 70, 238, 239
Weissbach, A., 153
Weissbach, H., 129
Weisz, J., 445, 478
Wellensick, S. J., 501
Wellington, P. S., 438, 439, 447, 448
Went, G. W., 408, 430
Werkman, C. H., 5, 138, 218
Wessels, J. S. C., 30
West, C., 267, 280, 281, 282, 284, 286
West, C. A., 444, 480, 501
West, S. H., 46
Westerveel, F. L., 450
Westwood, M. N., 91, 93
Wetmore, R. H., 403, 404, 406, 408, 409, 410, 416, 421, 429, 509, 510, 528
Wetter, L. R., 238, 240, 450
Wettstein, D. U., 37, 39, 40, 41
Whaley, W. C., 39
Whaley, W. G., 51, 547
Whatley, F. R., 4, 6, 20, 30, 166, 167
Wheeldon, L. W., 244, 246
Wheeler, H., 567
Wheeler, H. E., 566
Whelan, W. J., 310, 314, 316
Whistler, R. L., 312, 313, 314, 319, 321
Whitaker, D. R., 322, 323
White, F. C., 144
White, H. B., Jr., 450
White, H. L., 303
White, N. H., 564
White, P. R., 529, 545, 550, 572
White, R., 430
Whitfield, A. B., 91, 95
Whittier, D. P., 511
Whittingham, C. P., 3
Wiame, J. M., 202
Wiberg, J. S., 70
Wickson, M., 523
Wiebe, G. A., 439
Wiebe, H., 240
Wiemers, L. E., 450
Wieringa, K. I., 114, 122

Wiesner, J., 405
Wiessner, W., 17, 20
Wild, A., 37
Wildman, S., 190
Wildman, S. G., 16, 153, 184, 554
Wilkie, K. C. B., 320, 323
Wilkins, M. H. F., 48, 63
Williams, A. M., 6
Williams, C. N., 447
Williams, E., 96
Williams, E. F., 255
Williams, E. J., 395, 397
Williams, J., 500
Williams, P. C., 455
Williams, R. C., 46, 53
Williams, R. F., 92
Williamson, C. E., 270, 275, 276, 277, 278, 292
Williamson, S., 135
Wilson, A. T., 159
Wilson, C. M., 319, 322
Wilson, J. D., 238, 239
Wilson, J. K., 115
Wilson, L. G., 201-24; 207, 208, 209
Wilson, P. W., 11, 109, 115, 118, 121
Wilson, S. B., 118, 119
Winfield, M. E., 17
Winston, J. R., 268, 269, 270, 275, 279, 280
Wintermans, J. F. G. M., 33, 243, 248
Wipf, L., 112
Wise, J. B., 251
Wiser, R., 33, 243, 247, 248, 249, 257
Wiss, O., 251
Wissenbock, K., 343
Witham, F. H., 544
Withrow, A. P., 465, 468, 475
Withrow, R. B., 465, 466, 468, 474, 475, 481, 483
Witkop, B., 145
Witt, H. T., 17
Wittwer, S. H., 101, 345, 427
Witz, J., 60, 61
Wizerkaniuk, M., 215
Woese, C. R., 51, 58
Wohl, K., 14
Wohmer, C., 265
Wöhrmann, K., 494
Wokes, F., 342
Wolf, D. E., 35, 251
Wolf, R., 368, 369
Wolfe, R. G., 51
Wolfe, R. S., 139, 144, 146
Wolfe, H. S., 266
Wolff, S., 446
Wolffgang, H., 132
Wolfrom, M. L., 307
Wolken, J. J., 28, 49, 256
Wollgiehn, R., 33, 35
Wollman, E. L., 513
Wood, H. G., 156, 163, 563, 565
Wood, H. N., 533, 534, 542, 544
Wood, J. A., 316
Wood, R. B., 337
Woodard, J. W., 46
Woodhouse, W. W., Jr., 117
Woodstock, L. W., 46
Woolley, D. M., 216
Work, T. S., 49
Workman, M., 269, 283, 285
Worsham, A. D., 447
Wreay, D. G., 451
Wren, J. J., 256
Wright, A., 314
Wright, J. E., 145
Wright, R. C., 276
Wright, S. T. C., 56, 57, 404, 410, 426, 428, 429
Wu, Y. C., 319
Würdig, G., 455
Würsch, J., 251

Y

Yager, R. E., 427, 431
Yagi, T., 33, 212, 214, 215
Yamada, H., 568
Yamada, K., 339
Yamada, M., 236, 237, 450
Yamaguchi, A., 571
Yamaki, T., 278, 279, 444, 481
Yamamoto, Y., 252, 453
Yamana, K., 72
Yarwood, C. E., 560, 561
Yatazawa, M., 453
Yatsu, L., 99
Yemm, E. W., 129, 133, 144, 455, 456
Yin, F. H., 53, 56, 60
Yin, H. C., 304, 305
Yocum, C. S., 9, 177, 193
Yokohama, Y., 442
Yoshida, T., 305, 316, 319
Yost, H. T., Jr., 545, 555
Young, E. G., 132
Young, H. Y., 96
Young, J. L., 453
Young, J. R., 314, 321
Young, L., 202
Young, L. C. T., 457
Young, R. E., 267, 268, 270, 271, 272, 273, 275, 279, 280, 282, 283, 284, 285, 288, 289, 294, 345
Young, R. J., 68
Youngquist, R. W., 310
Yuan, C., 234, 235

Z

Zacks, S., 445
Zaitlin, M., 570
Zalensky, O. V., 182
Zalkin, H., 256
Zalokar, M., 48, 65
Zamecnik, P. C., 32, 49, 53
Zannis, C. D., 282
Zaphrir, J., 91
Zavanagi, A., 282
Zederbauer, E., 508
Zeevaart, J. A. D., 46
Zeigel, R. F., 48, 53, 57, 58
Zelitch, I., 32, 186, 188, 189
Zerahn, K., 394
Zeutten, E., 354
Zhbankov, R. G., 322
Zholkevich, V. N., 185
Zidan, Z. I., 91, 92, 93, 94, 101
Ziegler, H., 132, 139, 145
Zill, L. P., 225-64; 251, 252, 256, 257
Zillig, W., 55
Zilva, S. S., 345
Zimmerman, M. H., 304
Zimmerman, P. W., 267, 270, 276, 277, 278, 282, 502
Zimmerman, S. B., 312
Zore, S. V., 186
Zubay, G., 48, 63
Zuber, M. S., 314
Zuev, L. A., 455
Zurbicki, Z. I., 87, 101
Zwar, J. A., 111, 112, 119

SUBJECT INDEX

A

Abscission
  auxin and, 403-33
  in bean plant, 420-25
  chemicals affecting, 407
  chemistry of, 427-29
  ethylene and, 2-6
  of flowers, 425-27
  of fruits, 425-27
  internal factors controlling, 403-33
  leaf blade effect, 405-7, 410, 417
  locus of auxin action, 429-31
  pollinia and, 406
  slowing of, 404-10, 421-23
  speeding of, 410-20, 423-25
  transport details, 431-32
Acetate
  photometabolism of, 250
Adenosine triphosphate
  in tumors, 548
Aging, 489-503
  of clones, 494
  effect
    on genes, 490
  flowering, 500, 501
  juvenile stage
    in plants, 496-502
  maternal influence, 489
  radiation effect, 491
  seeds, 492-94
Aldolase, 32
Aldonic acids
  conversion
    to ascorbic acid, 336-37
  effect
    on ascorbic acid, 332
  oxidation product, 335
Algae
  aging in, 496
  allantoin in, 142
  ascorbic acid and light in, 342
  bacteria and, 17
  chlorophylls in, 33
  ion transport in, 388, 391-99
  manganese requirement, 17
  phytochrome system, 466
  polysaccharides in, 316
  red, 19
  reductive photosynthesis in, 154
  respiration
    relation to photosynthesis, 182
  sugar nucleotide in, 309
  urea cycle in, 137
Allagochrome, 186
Allantoic acid, 129, 139-44
Allantoin
  role, 139-44
  synthesis, 140
Alloxanic acid, 143
Alternation of generations, 507-11
Amino acids
  in germination, 453
  in lamellar proteins, 30
  in lipid complexes, 256-57
  synthesis, 12
  in tumors, 548
Ammonia detoxication, 129
Amylopectin, 312, 313, 314, 316
Amyloplasts, 313
Amylose, 313, 314
  in vitro synthesis, 308
Aneurine, 478
Antagonism, 95
Antheridium formation, 513-21
Anthocyanin synthesis, 468, 470, 472, 473
Antibodies
  from ribosomes, 69
Apical bud
  effect on abscission, 412
Apical cell
  of sporogon, 508
Apical dominance, 523
Apogamy, 507, 509
Apospory, 507
Apple
  ethylene and, 266, 283, 285
  grafting in, 498-99
  leaf standards, 101
  mineral needs, 91
  respiration, 177
Archegoniates
  developmental physiology of, 507-30
Arginine, 129-38, 144
Artichoke, 317
"Artifacts," 50
Arum respiration, 177
Ascorbic acid
  biosynthesis, 341-42
  boron effect on, 100
  direct conversion, 333-36
  enzyme studies, 336-39
  indirect conversion, 330-33
  metabolism, 329-48
  nitrogen effect, 345
  oxidase
    in infected tissues, 565
  pH effect, 346
  photosynthesis and, 343-45
  precursor, 339-40
  synthesis, 342-48
    from hexose unit, 329-36
  temperature effect, 347
  in tumor cells, 547
Aspergillus, 202-3
Athiorhodaceae
  anaerobic oxidation by, 9
  metabolism of, 8
  photosynthesis in, 2
ATP
  formation of, 5-6
  germination and, 455
  role
    in sulfate reduction, 212
  urea formation and, 131
Auxin
  abscission and, 403-33
  cell growth and, 324
  concentration effect, 419
  crown gall tissue and, 544
  effect
    on gametophytes, 523
  germination and, 444
  levels in disease, 561
  in nodules, 114
  tip concentration, 500
Auxin-ethylene theory, 278-79
Avocado respiration, 177
Avidin, 229

B

Bacillus respiration, 177
Bacteria
  algae and, 17
  chemosynthetic, 3, 7-10
  crown gall, 534
  enzyme synthesis in, 70
  fatty acid in, 250
  glucuronic acid conversion in, 335
  manganese requirement, 91
  pathological oxidation, 185
  photophosphorylation in, 6
  photosynthetic, 2, 5, 13, 14
  plants infected by, 572
  ribosome synthesis, 66
  rod form, 113
  role
    in tumor induction, 553
  root hair curling and, 111
  sulfate-reducing, 211
  ureide metabolism, 143
  see also Root nodules

Bacteriochlorophyll, 2
  spectral changes in, 15
Bacteroids in nodules, 113, 114
Banana
  ethylene and, 266, 285
  urea absorption, 136
Bark inversion, 499-500
Barley
  infection and, 564
  respiration, 177
Bean
  abscission studies in, 420-25
Biotin role
  in fatty acid synthesis, 235
Bisexuality, 511
Boron
  deficiency, 112
  effect
    on citrus, 100
Branch cuttings
  rooting of, 497
Broccoli, 276
Bromine
  in ethylene analysis, 271-72
Bronzing, 566
Bud
  axillary
    effect on abscission, 418
  of gametophores, 522-23
Butyrate photometabolism, 250

C

Cabbage seed viability, 492
Calcium
  pectate hypothesis, 323
    role in nodulation, 117
Callus, 528
Calvin-Benson cycle, 152
Calystra, 521-22
Canavanine, 144-46
Cantaloupe, 281
Carbohydrates
  breakdown
    in tumors, 572
  conversion
    from lipid, 252-54
  effect
    on mineral concentration, 91
  fat synthesis from, 231-32
  formation
    from CO_2, 4
  in germination, 451
  oxidation of, 4
  role
    in nodules, 113
Carbon
  C_2 fragment, 161-66
  distribution
    in plant, 303-4
  path
    photosynthesis, 151-68
Carbon dioxide
  dark fixation, 133
  effect
    on ethylene production, 288
  ethylene effect, 280
  fixation
    see also Photosynthesis
  fixation and enzymes, 167
  germination and, 449
  in Hill reaction, 166
  seed viability and, 492
Carbon monoxide
  effect, 176, 178, 196
  iron deficiency and, 179
Carboxylation, 153
Cardiolipin, 244
Carotenoids
  effect
    on post-harvest dormancy, 438
  metabolism, 258
  photo-oxidations and, 16
  photosynthesis and, 18
  spectral changes in, 15
Carrot, 535
Catalase, 305
  oxygen production and, 16
Caulonema, 508
Celery, 278
Cell
  in disease, 559
  division
    see also Tumors
  division causes, 445-46
  electrical potentials in, 379-401
  elongation causes, 445-46
  growth and auxin, 324
  ion transport in, 379-401
  lipids in, 257-58
  permeability, 277, 356-62
  ribosomes in, 48
  see also Aging; Crown gall; Water, internal relations of higher plants
Cellulose, 319-24
Cell wall
  role in ion transport, 389
  water, 360
Cephalin, 33
Cereals
  carbon source in, 304
  polysaccharides in, 317
Characeae
  ion transport in, 395
Chemoautotrophic bacteria, 3
Chemolithoautotrophic bacteria, 3
Chemosynthetic bacteria, 3, 9
Cherry, 101
Chloretone, 332
Chlorobacteria, 2
Chlorobium chlorophylls, 2
Chloromycetin, 51
Chlorophyll
  ascorbic acid and, 343
  bacterial, 2
  in chloroplasts, 38
  ethylene effect on, 277
  "unit," 14
Chloroplast
  chemistry of, 28-35
  chlorophyll in, 38
  chromoplasts, 41
  cytochrome oxidase in, 187
  cytochromes in, 30
  enzymes in, 30-32
  fatty acids in, 33
  fixation problems, 27
  isolation of, 28
  lamellar proteins, 30
  lipoprotein complex, 29
  morphology, 35-37
  nucleic acids in, 32-33
  photosynthesis in, 30, 31
  pigments in, 33
  protein synthesis in, 32
  role
    in lipid metabolism, 231
  structure in, 28, 35-39
  studies, 3, 6, 15, 19
  thykaloids, 35, 36, 37
  vitamin K in, 252
Chlorosis, 566
Choline sulfate formation, 216-17
Chromatin, 511
Chromatium studies, 11
Chromatography
  in lipid study, 226
Chromatophore and electron theory, 15
Chromoplasts, 41
Chromosomes
  aberrations, 490, 493
  breakage, 492
  crown gall, 537
Citric acid synthesis, 184
Citrulline, 129-38
Citrus
  boron effect on, 100
  deficiencies, 83, 89, 90
  flowering in, 499
  leaf analysis, 82
  potassium effect on, 99
Clones, 494
Cobalt
  photomorphogenesis, 478
  role
    in leguminous nodules, 118
Coenzyme function, 96
Colchicine, 527
Coleus abscission studies, 404-20
Conifers, 498
Copper
  enzymes, 184
  requirement, 91

role in nodulation, 119
Corn, 185
Cotyledons
and nodulation, 110
Crown gall disease, 533-55
cytology, 539
developmental phase, 539-40
inception phase, 535-39
histology, 539
origin, 549-52
phosphorus metabolism in, 547
Cryptomonads, 19
Cuttings
ease of rooting, 497
Cyanide
effect, 178, 194
ion movement and, 386
Cysteine, 202
formation, 202, 211, 215
role in sulfur cycle, 201
Cytochrome oxidase
localization of, 186-90
oxidation state of, 174
Cytochromes, 30, 191
in Desulfovibrio, 211
in oxygen evolution, 16
in photosynthesis, 14-16
role in thiosulfate oxidation, 219
spectral changes in, 15, 16

D

Deoxycholate, 53
Dessication and dormancy, 439
Desulfovibrio
enzymatic sulfate reduction, 211-15
Diffusion-pressure deficit, 371-72
Digitonin, 31
Dinitrophenol
effect
in respiration, 179-80
ion movement and, 386
Diphosphatidyl glycerol, 243-45
Disease
facultative parasites, 565-70
respiration in, 559-73
DNA
in chloroplasts, 33
distribution of, 511
helical, 46
messenger RNA and, 70
nodule growth and, 116
ribosome synthesis and, 67
root nodules and, 116
in tumors, 537-38, 553
Dormancy
carotenoids and, 438
dessication and, 439
gibberellic acid and, 438
inhibitors of, 438
oxygen effect, 446
physiology of, 438
potassium and, 438
protein and, 439
role of coats, 448
Drought effect, 185

E

E. coli
messenger RNA in, 72
RNA in, 60
sulfur cycle in, 203-4
Electrical potentials
in cells, 379-401
Electron flow
in photosynthesis, 7
Electron flow theory, 12-14, 15
Electron microscopy, 27, 45-72
Electron spin resonance, 15
Element concentration, 87
Element interaction, 98
Embryo
gibberellin in, 315
see also Germination
"Emerson effect," 19-20
Endodermis
and water transport, 361, 366
Endogenous chemical regulators
of germination, 446-47
Endosmosis, 358
Endosperm
gibberellin in, 315
starches, 312, 313
Energetics, 17-21
Energy conservation and oxidase, 184-86
Enzymes
in animal tissues, 337-39
in ascorbic acid metabolism, 336-42
cellulose resistance to, 323
in chloroplast lipoprotein, 30-32
in diffusion studies, 173
ethylene effect, 282
fluoride inhibition, 237
formation
in rhizobia, 111
in germination, 452
gibberellin effect on, 315
in high-energy reaction, 469-70
for lipid metabolism, 226
mineral deficiency and, 99
in photosynthesis, 3-5, 6
in polysaccharide metabolism, 318
in polysaccharide synthesis, 305
of reductive pentose phosphate pathway, 152-57
relation to CO_2 fixation, 167
ribosome-bound, 68
in sulfate reduction, 207-17
sulfhydryl role, 201
synthesis, 70
in ureide metabolism, 143
see also Lipid metabolism
Epinasty, 275, 277, 289
Episomes, 513
Ethylene
analysis, 267-74
auxin theory, 278
biochemistry of, 294
biogenesis, 295
carbon dioxide and, 288
effect on abscission, 414
flowers and, 276
formation, 265-98
fruits and, 279-87
fungi and, 274-75
oxygen and, 280, 288-90
physiology
of production, 287-88
precursor of, 296
-producing plants, 268-70
radioactivity of, 296
ripening and, 266-67
seeds and, 279
site of action, 282
solution tonicity and, 292
temperature and, 280, 287
toxic effects, 265
wounding and, 291-92
Exosmosis, 358
Explant studies, 422

F

Facultive parasites, 565-70
Fatty acids
biosynthesis, 226-36
in chloroplasts, 33
desaturation, 234
growth and, 255
oxidation, 236, 258
photoassimilation of, 8
polyethenoic, 232
synthesis, 235, 258
toxic, 232
Ferns
antheridium formation, 513-21
gametophyte growth change, 530
prothallia, 482
zygote, 510
Ferricyanide
in photosynthesis, 14
Fertilizer requirement, 102
see also Mineral analysis of plant tissues
Flavins, 192

enzymes, 176, 184
Flavoproteins
in fungi, 483
Flax, 231
Flowering, 500-2
age of plant and, 498
effect of ethylene, 276
geotropism and, 500
respiration and, 175
Flowers
abscission, 425-27
ethylene production by, 276
Fluoride and inhibition, 237
Fluoroacetate toxicity, 232
Fluxes
partial, 384
ion, 387-88, 393
Foliar spray, 83
Fructosans, 316-19
Fruit
abscission of, 425-27
ethylene production in, 279-87
growth mineral needs, 91
respiration, 267, 282
response
to wounding, 291-92
Fruiting
aging effect, 496
Fucoxanthol, 17, 18
Fungi
choline sulfate in, 216
ethylene production by, 274-75
light effect on, 483
pathological oxidation, 185
urea in, 129
Fungicides and nodulation, 119

G

Galactolipids, 33
Galactose compounds, 310-11
Galactosidase, 305
Galacturonic acid, 332
conversion
to ascorbic acid, 347
Gametophore bud initiation, 522-23
Gametophytes, 482
development, 518
growth change, 530
Gas chromatography, 273
Geotropism and ethylene, 277
Germination
auxin and, 444
carbohydrates in, 451
dormancy, 438-39
endogenous chemical regulators, 446-47
enzymes in, 237, 253
gibberellins and, 444
kinins and, 444
light and, 441-42
lipids in, 252, 450
metabolism of, 450-57
nitrate role, 449
nitrogen metabolism in, 452
nucleic acids in, 454
ontogeny and, 438-39
oxidative processes, 455-57
phosphorus metabolism in, 454-55
photoperiodism and, 442
phytin role, 455
polarity, 525-27
protein synthesis in, 453
regulation of, 439-50
respiratory gases role, 449
ribosomes, 46
sucrose and, 305
temperature and, 441-44
thermoperiodicity and, 439-41
tricarboxylic acid cycle in, 456
water relations and, 447-48
Gerontology, 489
Gibberellic acid
aging and, 502
effect on dormancy, 438
light and, 479-80
in sugar metabolism, 315
Gibberellin
effect on germination, 444-45
"Girdling," 499
Globules, 37
Glucose
role
in sporophyte development, 511
transport
in infection, 560
Glucuronic acid, 332
Glutamic acid synthesis, 184
Glutamine pathway
to urea, 135
Glutathione, 202
Glycerol, 189
effect on germination, 450
in germination, 450
metabolism, 236-37
Glycogen, 114
Glycolipids, 258
plant metabolism, 246-47
Glycolysis, 180
Glycosyl donors, 310
Grafting, 498
Grafts
mineral needs, 91
root nodules and, 116
Grana, 37
Grapefruit, 93
Grasses
germination, 438
polysaccharides in, 317
Gravimorphism, 500
Gravity effect, 403
Growth
antheridium, 513-21
auxin and, 324
ethylene and, 267
fatty acids and, 255
high-energy reaction, 468-71
inhibition, 135
light effects, 465-84
minerals and, 90, 91
nonorganized, 527
osmotic substrates and, 366-68
phytochrome system and, 466-68
regulators
of nodules, 119
respiration
in disease, 561
ribosomes and, 46
in tumors, 542
Guanidines, 144-46

H

Heavy metals
in roots, 85
Hematin compounds, 114
photochemistry of, 17
Hemicellulose, 319-24
Hemoglobin, 112, 114
Hexose
ascorbic acid from, 329-36
formation, 308
High-energy reaction, 468-71
Higher plants
electrical potential in, 399-400
internal water relations, 351-75
Hill reaction
inhibition of, 255
manganese and, 17
Hormone
action in tumors, 539-40
effect of pathogens on, 561
ethylene as, 266, 284
Hydantoins, 138-39
Hydrogen
diffusion in leaves, 171
inhibition of, 12
photoproduction of, 10-12, 13
uptake studies, 211
Hydroxylamine reduction, 215
Hypocotyl growth control, 469, 472, 476

I

IAA
abscission and, 407, 408, 410, 414-17
calyptra and, 521
nodule initiation and, 112
oxidase, 478
tumor growth and, 545

Infection
bacterial, 572
obligate parasites, 560
resistance to, 563-64
viral, 570-72
Inhibitors
of intact leaves, 176-81
Inulins, 316-19
Invertase, 305
Ion
interaction, 97, 98
transport, 379-401
uptake
ribosomes and, 46
tumor cells and, 544
Iron
accumulation effect, 179
chlorosis, 103
deficiency, 179
leaf analyses, 86
Isocitratase, 252
Isotopic competition technique, 202

J

Juvenile stage
in plants, 496-502

K

Kinases, 153
role
in sugar metabolism, 309
Kinetin
and aging, 492-93
Kinins
and germination, 444
Krebs cycle enzymes
in leaves, 4

L

Lamellae formation, 323
Lamellar
proteins
of chloroplasts, 30
system morphogenesis, 40
Leaf
age
and mineral content, 85, 91
age and respiration, 175
analysis, 82
ascorbic acid in, 342
carbon in, 304
cytochrome oxidase in, 186-90
dehiscence and ethylene, 277
epinasty, 275
inhibitors and, 176-81
respiration, 171-96
respiratory chain in, 190-93
see also Abscission
Lecithin, 33
Legumes
germination, 438
nodules
see Leguminous nodules
seed viability, 492
urea cycle, 134
Leguminous nodules
boron deficiency, 112-13
calcium and, 117
carbohydrate and, 113
chemical factors, 116-19
cobalt and, 118
copper and, 119
development, 109-14
fungicides and, 119
hematin compounds, 114
ineffective, 109, 113
infection initiation, 111
life cycle, 114
light effect, 119
magnesium and, 117
molybdenum and, 119
nitrogen and, 116-17
nitrogen fixation, 120-21
nodule growth, 112-14
pH, 117
preplanting effect, 110
role of DNA, 116
temperature effect, 119
thread growth, 112
tropical forms, 114-15
vitamins and, 119
Lemma removal, 438
Lemon
ethylene effect, 266
respiration, 177
Lesions, 571
Lettuce
plumular hook, 474-75
seed viability, 492
Lichen, 495
Light
absorption of, 19-20
anthocyanin synthesis and, 473
ascorbic acid synthesis and, 342
bud formation and, 522
changes by, 475-76
effects on growth, 465-84
fern prothallia and, 482
germination and, 441-46
gibberellic acid and, 479-80
green
and photosynthetic rate, 18
high-energy reaction, 468-71
nodulation and, 110, 119
photosynthesis and, 182
phototropism, 481
physiology, 483
polarity, 525-27
red far-red reversible pigment system, 523-24
respiration and, 181
sulfate reduction and, 206-7
Lignification effect
on dormancy, 439
Linoleic acid formation, 233
Linolenic acid formation, 233
Lipids
in cell, 257
chemistry, 258
chloroplast, 33, 34
conversion
to carbohydrate, 252-54
germination and, 450
metabolic effects of, 254-56
metabolism of, 225-58
methodology, 226
-soluble quinones
in electron transport, 251-52
Lipoic acid, 202
Lipoprotein complex
in chloroplast, 29
Liver RNA, 60
Liverworts, 528
Longevity, 403-33, 438, 494
Lycopene, 287
Lysopine, 548

M

Magnesium
effect
on nodulation, 117
requirement, 89, 90, 91
role
in ribosome binding, 59
Maize breeding, 313
Manganese
photosynthesis and, 17
requirement, 91
Mango
ethylene and, 279, 285, 286
respiration, 177
Mannitol, 363
Medicago, 112
Melon, 266, 285
Membrane
permeability, 351-56
potential
electrochemical, 380
origin, 385-86
Mercuric ion
in ethylene analysis, 272
Metal porphyrin complexes, 17
Methionine, 201, 202
tumors and, 528
Microsomal particle, 47
Mineral
analysis
of plant tissues, 81-104
deficiencies and ribosomes, 46
standard requirements, 101-2
Mitochondria
ascorbic acid studies, 341

citrulline synthesis in, 133
electron transport in, 14
isolation, 189, 191
photomorphogenesis, 476
ribosomes in, 49
sulfite oxidase in, 206
tricarboxylic acid cycle in, 456
in tumor cells, 546
Mitosis
in crown gall, 539
sulfhydryl role, 201
Molybdenum
ascorbic acid and, 348
nitrogen fixation and, 123
nodulation and, 119
Monocotyledon phytochrome system, 466-68
Mosses
allantoin in, 142
callus-like growth, 528
calyptra, 521
phytochrome system in, 466
sex physiology of, 511-13
sporogons, 508
Mushroom respiration, 177
Mustard seedling growth, 471-73
Mutant studies, 202
Mutation and age, 490, 493
Mycelia and fatty acids, 233
Myelin figures, 33

N

Necrosis, 566
Neoplastic disease, 534
Neurospora
sulfur cycle in, 204-5
Nitellopsis obtusa
in ion transport studies, 391-401
Nitrate
nodules and, 114
role
in germination, 449
Nitrogen
allantoin effect on, 139
arginine role, 144
citrulline and, 132
lack of, 303
phosphorus and, 95
requirement, 90, 94
role
in nodulation, 116-17
urea, 130
Nitrogen fixation
mechanism of, 120-21
nodules and, 109
nonleguminous nodules, 122-23
products of, 121
Nitrogen metabolism, 129
in germination, 452
in tumors, 548
Nodules, 109-24
nonleguminous, 115, 122-24
polygalacturonase and, 111
thread formation, 112
see also Leguminous nodules
Nucleic acids
in chloroplasts, 32-33
in germination, 454
measurements, 60
structure studies, 60
Nucleotides occurrence, 308
Nucleus
hypertrophy, 113
role
in infection, 111
in tumors, 538

O

Oat
diseased, 566
Oil palm, 101
Oleic acid formation, 233
Oligosaccharides, 310
Onion, 492
Ontogeny, 438-39
Orange
ethylene and, 266, 280
mineral requirement, 92
Orchard mineral analysis, 82
Organic solvents, 29
Organs
isotope osmotic studies in, 359-62
longevity, 403-33
Ornithine, 129-38
cycle, 146
reverse cycle, 138
Osmiophilic granules, 37
Osmosis
error in studies, 359
Osmotic
movement, 351-56
quantities measurement, 368-71
substrates, 362-68
Ouabain, 386
Oxidase and energy conservation, 184-86
Oxidative process
of germination, 455-57
Oxygen
in ascorbic acid synthesis, 344
consumption in disease, 566
dormancy and, 446
effect on ethylene, 288-90
ethylene effect on, 280
"half saturation," 177
production, 16-17
role
in tumor growth, 537
tension influence, 171, 174
tissue concentration, 172

P

Palade granule, 47
Palmitate, 229, 230
Parasites
facultative, 565-70
in rhizobia, 114
Pea root exudate and rhizosphere growth, 109
Peach mineral standard, 101
Peanut mineral standard, 89
Pear
ethylene and, 266, 285
fruiting in, 500
grafting, 498
Pentose cycle, 171
Pentose phosphate cycle, 4, 5
Peptides from ribosomes, 57
Permeability, barrier, 173
coefficient, 383-84
"PESIGS" rules, 404
Petiole
leaf studies, 85
see also Abscission
pH
in nodules, 117-18
ribosomes and, 48
Phaseolus vulgaris, 112
Phosphate
in ribosome studies, 66
Phosphatide
metabolism, 258
plant metabolism and, 246-47
Phosphatidic acid, 245-46
Phosphatidyl choline-alternate pathway, 239-41
Phosphatidyl glycerol, 243-45
Phosphatidyl-inositol, 33, 241-43
Phosphatidyl serine synthesis, 238-39
Phosphoglycerate reduction, 5
Phospholipid
biosynthesis, 237-46
complex, 246
Phosphorus
effect of nitrogen, 95
metabolism
in germination, 454-55
in tumors, 547
requirement, 89
Phosphorylase, 305
action on sugars, 315-16
Phosphorylation, 195
in disease, 562
reversal, 196
Photobiology, 474
Photomorphogenesis, 465-84
in cells, 475-76
high-energy reaction, 468
intermediary biochemistry, 476-79

Photomorphogenic reaction, 32
Photoperiodicity
  germination and, 442
  respiration and, 178
  ribosomes and, 46
Photophosphorylation, 5-10, 183
Photosynthesis, 465-84
  ascorbic acid and, 343
  bacterial, 2, 9, 13
  carbon path in, 151-68
  carboxylative phase, 153-54
  comparative study of, 1-21
  cytochromes in, 14-16
  electron flow theory, 7, 12-14
  energetics, 17-21
  enzymology of, 3-5
  hematin compounds and, 17
  hydrogen production, 10-12
  inhibition of, 5
  manganese and, 17
  oxygen production in, 16-17
  phosphorylations, 5-10
  quantum efficiency of, 20
  rate
    in green light, 18
    in reconstituted systems, 166-68
  reductive phase, 154-55
  regenerative phase, 155-57
  respiration and, 181-84
  role of CO_2, 166
  role
    in nodulation, 120
  study techniques, 1, 2
  sucrose formation, 305
  in virus diseased plants, 570
  see also Chloroplast
Phototaxis, 17-18
Phototropism, 481
  and ethylene, 277
Phycocyanin, 17, 18
Phycoerythrin, 17, 18
Phytase, 455
Phytin, 455
Phytochrome, 466-73, 475
Pigments
  absorption characteristics, 19-20
  in chloroplasts, 33
  in fungi, 483
    new, 186
    photosynthesis and, 2
    red far-red reversible system, 523-24
Pine flowering, 498
Pisum, 112
Plant longevity, 494
Plasmalemma, 389, 398
Plasmolysis
  effects
    on prothalli, 520
  light and, 476
  see also Water, internal relations of higher plants
Plastids
  development of, 39-41
  lamellar system and, 40
  structure of, 27-41
Plastocyanin, 31
Plastome, 33
Plastoquinone, 35, 192
Plumular hook
  of lettuce, 474-75
Pods
  abscission of, 426
Polarity, 525-27
Pollinia, 406
Polyamines, 55, 59
Polycytosine, 72
Polygalacturonase, 111
Poly-β-hydroxybutyrate, 250-51
Polyphenol oxidase, 184
Polyploidy, 539
Polysaccharides
  of higher plants, 303-24
  precursor, 305
  rhizobial, 115
Polyteny, 539
Pore diameter and osmosis, 351-56
Post-harvest
  dormancy, 438
  physiology, 265
Potassium
  deficiency, 88, 91, 92, 99
  effect on dormancy, 438
Potato
  ethylene and, 266
  respiration and, 177
"Poverty adjustment zone," 88
Pre-abscission time, 409
Protease
  in seeds, 453
Protein
  antibody to, 153
  components
    of ribosomes, 59
  effect
    on copper, 99
  lamellar, 30
  level and dormancy, 439
  lipid complexes, 256-57
  metabolism alteration, 477
  nascent, 67-69
  in prothallia, 482
  in tumors, 537-38
Protein synthesis, 5-46
  in germination, 453
  messenger RNA and, 71
  see also Ribosomes
Prothallia, 482
Pyridine nucleotides, 192
  reduction
    by chloroplasts, 4, 14, 16
Pyrophosphorylases, 309
Purine
  aerobic degradation, 140
  metabolism, 142

Q

Quinacrine, 214
Quinones
  in electron transport, 251

R

Radiation
  abnormalities and, 528
  life span and, 491
  mutations and, 493
Reductive pentose phosphate cycle, 151
  enzymes of, 152-57
  in vivo, 157-61
Reproductive exhaustion, 495
Reproductive stress, 491
Respiration
  in disease, 559-73
  dinitrophenol effect, 179-80
  drought effect, 185
  ethylene effect on, 267, 277
  in germination, 449, 456
  "half-saturation" of oxygen in, 177
  in host-fungal combination, 560-70
  inhibitors of, 176-78
  leaf, 171-96
  in normal cells, 559
  photoperiodism and, 178
  photosynthesis and, 181-84
  in resistant and susceptible hosts, 564-65
  at tissue level, 171-76
  in tumors, 545-47
Respiratory chain
  in leaves, 190-93
Respiratory inhibitors
  in disease studies, 563
Respiratory pathway without cytochrome oxidase, 193
Reticulocytes
  ribosomes in, 47
Reticulum, 51
Rhizobia
  agricultural aspects, 122
  classification, 115
  development, 109-11
  ecological aspects, 122
  infection thread, 111-12
  parasitism, 114
  polygalacturonase and, 111
  polysaccharides of, 115
  see also Leguminous nodules
Rhizoid formation, 524-25

Rhizosphere, 109-11
Ribonuclease, 56
Ribonucleic acid
in tumors, 537-38
Ribonucleoprotein particles, 45-77
Ribosomes, 45-77
biosynthesis of, 65-67
chemical composition, 54-55
concentration in cell, 52
dissociation of, 57
form, 50
function, 64-65
germination and, 46
growth and, 46
ion uptake and, 46
isolation of, 52-54
messenger RNA, 69-72
mineral deficiencies and, 46
nascent proteins and, 67-69
nomenclature, 47-48
occurrence, 48-52
photoperiodicity and, 46
physical properties, 56-63
protein components, 59
reticulum and, 51
ripening and, 46
RNA components, 60
root development, 46
structures, 63-64
water uptake and, 46
Rice, 177
"Ringing," 499
Ripening
ethylene and, 266, 280, 284
ribosomes and, 46
RNA
in chloroplasts, 33
components of ribosomes, 60-62
dissociation of, 62
functions, 46
messenger, 69-72
see also Ribosomes
Root
development and ribosomes, 46
drought effect, 185
ethylene effect on, 277
growth inhibition, 476
hair curling, 111
invasion by rhizobia, 115
nodules, 109-24
see also Leguminous nodules
water exchange in, 359
Rooting
of cuttings, 497
Rotifers, 490
Rust infection, 561

S

Safflower
infected, 561
lipid changes in, 231, 233
Salmonella
sulfate reduction in, 205-7
Salts
in ascorbic acid synthesis, 344
water uptake and, 351
Sap, 371
Scutellum, 307
Sea water
ion transport studies in, 391-95
Seaweed, 134
polysaccharides in, 316
Seed coat
permeability, 438
role
in germination, 448
viability and, 492
Seeds
aging, 492-94
ethylene and, 279
germination, 437-57
glycerol metabolism in, 236
lipid in, 231
oil phosphoinositides, 242
polysaccharides in, 311
Senescence, 265, 489-503
factor
in abscission, 420, 425
Serum albumins, 56
Sexual regenerates, 512
Shoot reaction
to ethylene, 277
Slime mold, 275
Sodium
requirement, 88, 89, 91
role
in ion movement, 385-86
Soil
acidity and mineral uptake, 100
analysis, 82
Solutes and water uptake, 362-68
Solution tonicity, 292
Soybean
fatty acids in, 232
nodule infection in, 112
Spinach, 177
Spirilloxanthin, 18
Sporogon, 507-8
calyptra role, 521-22
Sprouting, 438, 448
sucrose and, 305
Starch
amylolytic degradation, 314-15
dinitrophenol effect on, 180
formation, 37
synthesis, 304-7, 312-16
"Steenbjerg-effect," 88
Stem
gibberellic acid and, 479-80
growth, 481
Strawberry, 101
Succinate
photometabolism, 250
synthesis, 7
Succinic acid
synthesis, 184
Sucrose
germination and, 305
sprouting and, 305
synthesis, 307
transport of, 304
water uptake and, 362
Sugar cane, 177
Sulfate activation, 207, 215
Sulfate reduction, 201-21
in Desulfovibrio, 211-15
plant physio
in vivo studies, 202-7
light effect on, 206-7
in yeast, 208-10
Sulfite reduction, 210, 213-14, 216
Sulfokinases, 207
Sulfolipids, 33, 247-51, 258
Sulfonic acid, 248-49
Sulfonium compounds, 202
Sulfur
assimilation, 202
dioxide oxidation product, 206
reduction metabolism, 202, 215
see also Sulfolipids
Synergism, 95, 470

T

Taurine synthesis, 216
Temperature
effect on germination, 441-44
nodulation and, 119
Tetrathionate
reduction, 215
in sulfur cycle, 218
Thermoperiodicity
effect on germination, 439-41
Thiobacilli, 219
oxidative pathway, 218-19
sulfur metabolism, 217-21
Thiorhodacae
photochemistry in, 17-18
photosynthesis in, 2
Thiosulfate
oxidation, 219
reduction, 210-11, 214, 216
Thykaloids, 35, 36, 37
Tip
auxin concentration in, 500
effect
on abscission, 414

Tissue
age and mineral composition, 93
permeability, 356-62
Tissue analysis, 81-104
interpretation problems, 87-101
method of expression, 86-87
sampling, 84-86
"washing" and, 86
Tobacco
germination of, 444, 445
oxygen tension effect, 175
Tomato
diseased, 566
ethylene and, 266
Tonoplast role
in ion transport, 393, 394
Transglycosylases, 310
Translocation effect
on tissue elements, 94
Transpiration effect
on solute uptake, 365
Trifolium, 112
Trisaccharide, 310
Tuber, 277
Tumors, 528-29
amino acids, 548
animal and plant, 533
biochemistry of, 545-49
cell origin, 549-52
crown gall disease, 533-55
DNA in, 537
-inducing principle, 552
ion uptake in, 544
nitrogen metabolism of, 548
physiology of, 540-45
"progression principle," 555
protein in, 537
respiration in, 545-47
virus as cause, 554
Tumorization, 112
Tung tree nutrition, 86
Turgor pressure, 351-75

U

Ubiquinone, 192
Uracil, 309
Uranyl, 172
Urea
absorption, 136
biosynthesis, 130
as nitrogen source, 130
in plants, 129-38
synthesis, 135-36
Ureides
in plants, 138-44
Uronic acid derivatives, 332, 337

V

Vacuole
osmotic pressure in, 371
role
in ion transport, 389
water inaccessibility, 359
Vapor gap, 366
Victorin, 566
Vineyard mineral analysis, 82
Virus
disease symptoms, 103
-infected plants, 570-72
pathological oxidation, 185
as tumor cause, 554
Vitamin
effect
in nodulation, 119
K
in chloroplast, 252

W

Water
absorption, 351
in chloroplasts, 29
deficit effects, 351
effect
on germination, 447
error
in osmotic studies, 359
internal relations
of higher plants, 351-75
osmotic measurement, 368-71
osmotic movement, 351-56
salt and, 351
tissue permeability, 356-62
"Water potential," 374
Water uptake
ribosomes and, 46
solute relation and, 362-68
Wheat
drought effect, 185
infected, 561
sprouting, 448
Willow seed viability, 492
Wounding
fruit response to, 291-92

X

X-rays
effect
on flowering, 502
Xylans, 321

Y

Yeast, 46
carbon monoxide effect, 181
desaturation
of fatty acids, 234
enzymatic sulfate reduction, 207-11
ethylene production by, 275
fatty acid synthesis in, 232
oxygen tension in, 174
RNA in, 60
urea assimilation, 137
urea synthesis, 134

Z

Zinc requirement, 91
Zygote
as cell type, 509

CUMULATIVE INDEXES

VOLUMES 4-13

INDEX OF CONTRIBUTING AUTHORS

A

Åberg, B., 8:153
Addicott, F. T., 6:211
Allen, P. J., 5:225
Arnon, D. I., 7:325
Ashton, F. M., 8:275
Axelrod, B., 7:267

B

Barber, D. A., 11:127
Bawden, F. C., 10:239
Bayley, S. T., 12:35
Beakbane, A. B., 8:217
Beevers, H., 7:267
Bennett, C. W., 7:143
Bentley, J. A., 9:47
Bergmann, W., 4:383
Bernstein, L., 9:25
Billings, W. D., 8:375
Blinks, L. R., 5:93
Bogorad, L., 9:417
Bollard, E. G., 11:141
Bonner, W. D., Jr., 8:427
Borthwick, H. A., 7:299
Boynton, D., 5:31
Bradbeer, C., 10:197
Braun, A. C., 5:133; 13:533
Brauner, L., 5:163
Brian, P. W., 8:413
Briggs, G. E., 8:11
Brodie, H. W., 8:275
Brown, A. H., 4:23
Brown, J. C., 7:171
Broyer, T. C., 10:277
Bünning, E., 7:71
Burg, S. P., 13:265
Burr, G. O., 8:275
Burris, R. H., 4:91; 10:301
Burström, H., 4:237

C

Cathey, H. M., 12:369
Chance, B., 9:499
Chandler, W. H., 10:1
Cheadle, V. I., 8:349
Cheniae, G. M., 13:225
Chouard, P., 11:191
Christensen, J. J., 6:367
Clendenning, K. A., 8:137
Coleman, R. E., 8:275
Collander, R., 8:335
Crafts, A. S., 4:253
Crane, F. L., 12:13
Currier, H. B., 8:349

D

Dainty, J., 13:379
Danielson, C. E., 7:215
De Vay, J. E., 6:367
Dimond, A. E., 6:329; 10:257
Doorenbos, J., 10:147
Ducet, G., 13:171
Duysens, L. N. M., 7:25

E

Eaton, F. M., 6:299
Embleton, T. W., 9:175
Emerson, R., 9:1
Epstein, E., 7:1
Esau, K., 8:349
Eyring, H., 5:271

F

Fawcett, C. H., 12:345
Fogg, G. E., 7:51
Folkes, B. F., 9:245
Frenkel, A. W., 4:23, 10:53
Fried, M., 12:91

G

Galston, A. W., 11:239
Gauch, H. G., 8:31
Gautheret, R. J., 6:433
Gibbs, M., 10:329
Goddard, D. R., 5:115
Goodwin, R. H., 4:283
Goodwin, T. W., 12:219
Gordon, S. A., 5:341
Greenidge, K. N. H., 8:237
Gruen, H. E., 10:405

H

Haagen-Smit, A. J., 4:305
Hackett, D. P., 10:113
Hagan, R. M., 12:265
Hansch, C., 6:157
Hartree, E. F., 4:115
Hartt, C. E., 8:275
Hayward, H. E., 9:25
Heinze, P. H., 5:205
Hendricks, S. B., 7:299
Hill, R., 4:115
Hoch, G., 12:155
Holly, K., 9:311
Horsfall, J. G., 10:257

I

Iljin, W. S., 8:257
Isherwood, F. A., 13:329

J

Jacobs, W. P., 13:403
Jaffe, L. F., 9:359
James, W. O., 4:59
Jones, W. W., 9:175

K

Kamiya, N., 11:323
Kandler, O., 11:37
Ketchum, B. H., 5:55
Klein, S., 13:437
Kok, B., 12:155
Koller, D., 13:437
Kortschak, H. P., 8:275
Kramer, P. J., 6:253
Krasnovksy, A. A., 11:363
Krauss, R. W., 9:207
Kremers, R. E., 10:185
Kursanov, A. L., 7:401

L

Laties, G. G., 10:87
Leopold, A. C., 9:281
Liverman, J. L., 6:177
Lumry, R., 5:271
Lundegårdh, H., 6:1
Lynch, R. S., 6:211

M

McCready, C. C., 9:311
McElroy, W. D., 5:1
Mapson, L. W., 9:119; 13:329
Marrè, E., 12:195
Mason, H. L., 5:249
Mayer, A. M., 13:437
Melin, E., 4:325
Menke, W., 13:27
Mercer, F., 11:1
Middleton, J. T., 12:431
Miller, C. O., 12:395
Millerd, A., 13:559
Mirov, N. T., 10:223
Mohr, H., 13:465

Mothes, K., 6:393; 13:129
Muir, R. M., 6:157

N

Näf, U., 13:507
Nason, A., 5:1
Neish, A. C., 11:55
Nicholas, D. J. D., 12:63
Nitsch, J. P., 4:199

O

Osterhout, W. J. V., 8:1
Overbeek, J. van, 7:355

P

Paech, K., 6:273
Pentzer, W. T., 5:205
Phinney, B. O., 11:411
Pirie, N. W., 10:33
Pirson, A., 6:71
Poljakoff-Mayber, A., 13:437
Pollard, J. K., 8:65
Porter, H. K., 13:303
Purves, W. K., 11:239

Q

Quastel, J. H., 5:75

R

Raggio, M., 13:109
Raggio, N., 13:109
Raney, F. C., 12:265
Ranson, S. L., 11:81
Raschke, K., 11:111
Ray, P. M., 9:81
Reinert, J., 10:441
Reinbothe, H., 13:129
Reuther, W., 9:175
Robertson, R. N., 8:11
Rogers, W. S., 8:217
Rosenberg, A. J., 13:171
Rosenberg, J. L., 8:115
Rufelt, H., 12:409
Russell, R. S., 11:127

S

Sadasivan, T. S., 12:449
Salisbury, F. B., 12:293
Samish, R. M., 5:183
Sax, K., 13:489
Scott, K. J., 13:559
Setterfield, G., 12:35
Shantz, E. M., 10:379
Shapiro, R. E., 12:91
Siegel, A., 11:277
Slatyer, R. O., 13:351
Smith, L., 9:449
Smith, P. F., 13:81
Spikes, J. D., 5:271
Stafford, H. A., 5:115
Stahmann, M. A., 6:351
Stanley, R. G., 10:223
Steemann Nielsen, E., 11:341
Steinberg, R. A., 9:151
Stern, H., 7:91
Steward, F. C., 8:65; 10:379
Stiller, M., 13:151
Stolwijk, J. A. J., 7:373
Stout, P. R., 5:249; 10:277
Stowe, B. B., 8:181
Stuart, N. W., 12:369
Stumpf, P. K., 10:197

T

Takahashi, D., 8:275
Talling, J. F., 12:133
Tamiya, H., 8:309
Tanimoto, T., 8:275
Taylor, J. H., 12:327
Teas, H. J., 8:393
Teubner, F. G., 10:13
Thomas, M., 11:81
Thomas, M. D., 6:135
Toole, E. H., 7:299
Toole, V. K., 7:299
Torrey, J. G., 7:237
Tso, T. C., 9:151
Ts'o, P. O. P., 13:45

U

Ulrich, R., 9:385

V

Vaadia, Y., 12:265
van Niel, C. B., 13:1
Varner, J. E., 12:245
Veldstra, H., 4:151
Vennesland, B., 3:307
Virgin, H. I., 4:363
Virtanen, A. I., 12:1
Vishniac, W., 6:115

W

Walker, J. C., 6:351
Walter, H., 6:239
Wareing, P. F., 7:191
Wassink, E. C., 7:373
Webster, G. C., 6:43; 12:113
Wellensiek, S. J., 10:147
Went, F. W., 4:347
West, C. A., 11:411
Wildman, S. G., 11:277
Williams, R. F., 6:25
Wilson, L. G., 13:201
Wittwer, S. H., 10:13
Wolken, J. J., 10:71
Wood, J. G., 4:1
Wood, R. K. S., 11:299
Woodford, E. K., 9:311

Y

Yamaki, T., 8:181
Yarwood, C. E., 7:115
Yemm, E. W., 9:245
Yocum, C. S., 11:25

Z

Zill, L. P., 13:225
Zimmerman, M. H., 11:167

INDEX OF CHAPTER TITLES

VOLUMES 4-13

CELL STRUCTURE AND FUNCTION		
Physical Properties of Protoplasm	H. I. Virgin	4:363-82
Localization of Enzymes in the Cells of Higher Plants	D. R. Goddard, H. A. Stafford	5:115-32
The Structure of the Chloroplast	J. J. Wolken	10:71-86
The Submicroscopic Structure of the Cell	F. Mercer	11:1-24
Structure and Function of Mitochondria	F. L. Crane	12:13-34
Structure and Physiology of Cell Walls	G. Setterfield, S. T. Bayley	12:35-62
Structure and Chemistry of Plastids	W. Menke	13:27-44
The Ribosomes–Ribonucleoprotein Particles	P. O. P. Ts'o	13:45-80
MINERAL NUTRITION		
Mechanism of Action of Micronutrient Elements in Enzyme Systems	W. D. McElroy, A. Nason	5:1-30
Nutrition by Foliar Application	D. Boynton	5:31-54
Mineral Nutrition of Phytoplankton	B. H. Ketchum	5:55-74
Soil Conditioners	J. H. Quastel	5:75-92
Functional Aspects in Mineral Nutrition of Green Plants	A. Pirson	6:71-114
Iron Chlorosis	J. C. Brown	7:171-90
Mineral Nutrition of Plants	H. G. Gauch	8:31-64
Mineral Nutrition of Tree Crops	W. Reuther, T. W. Embleton, W. W. Jones	9:175-206
Foliar Absorption of Mineral Nutrients	S. H. Wittwer, F. G. Teubner	10:13-32
The Macronutrient Elements	T. C. Broyer, P. R. Stout	10:277-300
Minor Mineral Nutrients	D. J. D. Nicholas	12:63-90
Soil-Plant Relationships in Ion Uptake	M. Fried, R. E. Shapiro	12:91-112
Mineral Analysis of Plant Tissues	P. F. Smith	13:81-108
NITROGEN METABOLISM		
Nitrogen Metabolism of Higher Plants	J. G. Wood	4:1-22
Nitrogen Metabolism	G. C. Webster	6:43-70
Nitrogen Fixation by Photosynthetic Organisms	G. E. Fogg	7:51-70
Plant Proteins	C. E. Danielson	7:215-36
Nitrogen Metabolism in Plants: Ten Years in Retrospect	F. C. Stewart, J. K. Pollard	8:65-114
The Metabolism of Amino Acids and Proteins in Plants	E. W. Yemm, B. F. Folkes	9:245-80
Leaf Proteins	N. W. Pirie	10:33-52
Nitrogen Nutrition	R. H. Burris	10:301-28
Nitrogen Fixation	C. S. Yocum	11:25-36
Some Aspects of the Structure and Behavior of Tobacco Mosaic Virus	A. Siegel, S. G. Wildman	11:277-98
Some Aspects of Amino Acid Synthesis in Plants and Related Subjects	A. I. Virtanen	12:1-12
Protein Synthesis	G. Webster	12:113-32
Root Nodules	M. Raggio, N. Raggio	13:109-28
Urea, Ureides, and Guanidines in Plants	H. Reinbothe, K. Mothes	13:129-50
PHOTOSYNTHESIS		
Photosynthesis	A. H. Brown, A. W. Frenkel	4:23-58
The Photosynthetic Function of Pigments Other than Chlorophyll	L. R. Blinks	5:93-114
Photosynthesis	R. Lumry, J. D. Spikes, H. Eyring	5:271-340
Biochemical Aspects of Photosynthesis	W. Vishniac	6:115-34
Effect of Ecological Factors on Photosynthesis	M. D. Thomas	6:135-56

Energy Transformations in Photosynthesis	L. N. M. Duysens	7:25-50
Phosphorus Metabolism and Photosynthesis	D. I. Arnon	7:325-54
Photochemistry of Chlorophyll	J. L. Rosenberg	8:115-36
Biochemistry of Chloroplasts in Relation to the Hill Reaction	K. A. Clendenning	8:137-52
The Quantum Yield of Photosynthesis	R. Emerson	9:1-24
Cytochromes in Plants	L. Smith, B. Chance	9:449-82
Light Induced Reactions of Bacterial Chromatophores and Their Relation to Photosynthesis	A. W. Frenkel	10:53-70
The Structure of the Chloroplast	J. J. Wolken	10:71-86
Energy Transfer Through Phosphorylation Mechanisms in Photosynthesis	O. Kandler	11:37-54
Productivity of the Oceans	E. Steemann Nielsen	11:341-62
The Primary Processes of Photosynthesis in Plants	A. A. Krasnovsky	11:363-410
Photosynthesis Under Natural Conditions	J. F. Talling	12:133-54
Photosynthesis	G. Hoch, B. Kok	12:155-94
Biosynthesis and Function of Carotenoids	T. W. Goodwin	12:219-44
The Present Status of the Comparative Study of Photosynthesis	C. B. van Niel	13:1-26
The Path of Carbon in Photosynthesis	M. Stiller	13:151-70
RESPIRATION		
The Use of Respiratory Inhibitors	W. O. James	4:59-90
Mechanisms of Carbohydrate Breakdown in Plants	B. Axelrod, H. Beevers	7:267-98
Soluble Oxidases and Their Functions	W. D. Bonner, Jr.	8:427-52
Cytochromes in Plants	L. Smith, B. Chance	9:449-82
Respiratory Mechanisms in Higher Plants	D. P. Hackett	10:113-46
Metabolism of Carbon Compounds	M. Gibbs	10:329-78
Crassulacean Acid Metabolism	S. L. Ranson, M. Thomas	11:81-110
Structure and Function of Mitochondria	F. L. Crane	12:13-34
Phosphorylation in Higher Plants	E. Marre	12:195-218
Leaf Respiration	G. Ducet, A. J. Rosenberg	13:171-200
GENERAL METABOLISM		
Organic Acids in Plant Metabolism	R. H. Burris	4:91-114
Hematin Compounds in Plants	R. Hill, E. F. Hartree	4:115-50
The Biogenesis of Terpenes	A. J. Haagen-Smit	4:305-24
The Plant Sterols	W. Bergmann	4:383-426
Mechanism of Action of Micronutrient Elements in Enzyme Systems	W. D. McElroy, A. Nason	5:1-30
Postharvest Physiology of Fruits and Vegetables	W. T. Pentzer, P. H. Heinze	5:205-24
Colour Development in Flowers	K. Paech	6:273-98
Physiology of Alkaloids	K. Mothes	6:393-432
Mechanisms of Carbohydrate Breakdown in Plants	B. Axelrod, H. Beevers	7:267-98
Soluble Oxidases and Their Functions	W. D. Bonner, Jr.	8:427-52
Metabolism of Ascorbic Acid in Plants: Part I. Function	L. W. Mapson	9:119-50
Postharvest Physiology of Fruits	R. Ulrich	9:385-416
The Biogenesis of Flavonoids	L. Bogorad	9:417-48
The Lignins	R. E. Kremers	10:185-96
Fat Matabolism in Higher Plants	P. K. Stumpf, C. Bradbeer	10:197-222
Metabolism of Carbon Compounds	M. Gibbs	10:329-78
Biosynthetic Pathways of Aromatic Compounds	A. C. Neish	11:55-80
Crassulacean Acid Metabolism	S. L. Ranson, M. Thomas	11:81-110

Pectic and Cellulolytic Enzymes in Plant Disease	R. K. S. Wood	11:299-322
Biosynthesis and Function of Carotenoids	T. W. Goodwin	12:219-44
Biochemistry of Senescence	J. E. Varner	12:245-64
Physiology of Mitosis and Meiosis	J. H. Taylor	12:327-44
Metabolism of Sulfate: Sulfate Reduction	L. G. Wilson	13:201-24
Lipid Metabolism	L. P. Zill, G. M. Cheniae	13:225-64
The Physiology of Ethylene Formation	S. P. Burg	13:265-302
Synthesis of Polysaccharides of Higher Plants	H. K. Porter	13:303-28
Ascorbic Acid Metabolism in Plants: Part II. Biosynthesis	F. A. Isherwood, L. W. Mapson	13:329-50
WATER RELATIONS		
The Water Economy and the Hydrature of Plants	H. Walter	6:239-52
Water Relations of Plant Cells and Tissues	P. J. Kramer	6:253-72
Drought Resistance in Plants and Physiological Processes	W. S. Iljin	8:257-74
Heat Transfer Between the Plant and the Environment	K. Raschke	11:111-26
The Relationship Between Salt Uptake and the Absorption of Water by Intact Plants	R. S. Russell, D. A. Barber	11:127-40
Plant Water Deficits and Physiological Processes	Y. Vaadia, F. C. Raney, R. M. Hagan	12:265-92
Physiology of Wilt Disease	T. S. Sadasivan	12:449-68
Internal Water Relations of Higher Plants	R. O. Slatyer	13:351-78
ABSORPTION AND TRANSLOCATION		
Nutrition by Foliar Application	D. Boynton	5:31-54
Mechanisms of Absorption, Transport, Accumulation, and Secretion of Ions	H. Lundegårdh	6:1-24
Redistribution of Mineral Elements During Development	R. F. Williams	6:25-42
Mineral Nutrition of Plants: Mechanisms of Uptake and Transport	E. Epstein	7:1-24
Absorption and Translocation of Plant Regulators	J. van Overbeek	7:355-72
Apparent Free Space	G. E. Briggs, R. N. Robertson	8:11-30
Ascent of Sap	K. N. H. Greenidge	8:237-56
Permeability of Plant Cells	R. Collander	8:335-48
Physiology of Phloem	K. Esau, H. B. Currier, V. I. Cheadle	8:349-74
Foliar Absorption of Mineral Nutrients	S. H. Wittwer, F. G. Teubner	10:13-32
Active Transport of Salt into Plant Tissue	G. G. Laties	10:87-112
The Relationship Between Salt Uptake and the Absorption of Water by Intact Plants	R. S. Russell, D. A. Barber	11:127-40
Transport in the Xylem	E. G. Bollard	11:114-66
Transport in the Phloem	M. H. Zimmermann	11:167-90
Physics and Chemistry of Protoplasmic Streaming	N. Kamiya	11:323-40
Ion Transport and Electrical Potential in Plant Cells	J. Dainty	13:379-402
GROWTH AND DEVELOPMENT		
The Relation of Chemical Structure to Biological Activity in Growth Substances	H. Veldstra	4:151-98
The Physiology of Fruit Growth	J. P. Nitsch	4:199-236

Physiology of Root Growth	H. Burström	4:237-52
Herbicides	A. S. Crafts	4:253-82
The Effect of Temperature on Plant Growth	F. W. Went	4:347-62
The Physiology of Plant Tumors	A. C. Braun	5:133-62
Tropisms and Nastic Movements	L. Brauner	5:163-82
Dormancy in Woody Plants	R. M. Samish	5:183-204
Occurrence, Formation and Inactivation of Auxins	S. A. Gordon	5:341-78
Chemical Constitution as Related to Growth Regulator Action	R. M. Muir, C. Hansch	6:157-76
The Physiology of Flowering	J. L. Liverman	6:177-210
Physiology of Abscission	F. T. Addicott, R. S. Lynch	6:211-38
Tissue Culture	R. J. Gautheret	6:433-84
Endogenous Rhythms in Plants	E. Bünning	7:71-90
The Physiology of Cell Division	H. Stern	7:91-114
Photoperiodism in Woody Plants	P. F. Wareing	7:191-214
Physiology of Root Elongation	J. G. Torrey	7:237-66
Physiology of Seed Germination	E. H. Toole, S. B. Hendricks, H. A. Borthwick, V. K. Toole	7:299-324
Absorption and Translocation of Plant Regulators	J. van Overbeek	7:355-72
Effects of Light Quality on Plant Growth	E. C. Wassink, J. A. J. Stolwijk	7:373-400
Auxin Relations in Roots	B. Aberg	8:153-80
The History and Physiological Action of the Gibberellins	B. B. Stowe, T. Yamaki	8:181-216
Mass Culture of Algae	H. Tamiya	8:309-34
Effects of Antibiotics on Plants	P. W. Brian	8:413-26
The Naturally Occurring Auxins and Inhibitors	J. A. Bentley	9:47-80
Destruction of Auxin	P. M. Ray	9:81-118
Auxin Uses in the Control of Flowering and Fruiting	A. C. Leopold	9:281-310
Herbicides	E. K. Woodford, K. Holly, C. C. McCready	9:311-58
Morphogenesis in Lower Plants	L. F. Jaffe	9:359-84
Photoperiodic Control of Floral Induction	S. J. Wellensiek, J. Doorenbos	10:147-84
The Chemical Regulation of Growth (Some Substances and Extracts which Induce Growth and Morphogenesis)	F. C. Steward, E. M. Shantz	10:379-404
Auxins and Fungi	H. E. Gruen	10:405-40
Phototropism and Phototaxis	J. Reinert	10:441-58
Vernalization and Its Relation to Dormancy	P. Chouard	11:191-238
The Mechanism of Action of Auxin	A. W. Galston, W. K. Purves	11:239-76
Gibberellins as Native Plant Growth Regulators	B. O. Phinney, C. A. West	11:411-36
Structure and Physiology of Cell Walls	G. Setterfield, S. T. Bayley	12:35-62
Biochemistry of Senescence	J. E. Varner	12:245-64
Photoperiodism and the Flowering Process	F. B. Salisbury	12:293-326
Physiology of Mitosis and Meiosis	J. H. Taylor	12:327-54
Indole Auxins	C. H. Fawcett	12:345-68
Applied Aspects of the Gibberellins	N. W. Stuart, H. M. Cathey	12:369-94
Kinetin and Related Compounds in Plant Growth	C. O. Miller	12:395-408
Geotropism in Roots and Shoots	H. Rufelt	12:409-30
Longevity of Plant Organs: Internal Factors Controlling Abscission	W. P. Jacobs	13:403-36
Seed Germination	D. Koller, A. M. Mayer, A. Poljakoff-Mayber, S. Klein	13:437-64
Primary Effects of Light on Growth	H. Mohr	13:465-88
Aspects of Aging in Plants	K. Sax	13:489-506
Developmental Physiology of Lower Archegoniates	U. Näf	13:507-32

STRESS PHYSIOLOGY		
Drought Resistance in Plants and Physiological Processes	W. S. Iljin	8:257-74
Physiology of Salt Tolerance	L. Bernstein, H. C. Hayward	9:25-46
Plant Water Deficits and Physiological Processes	Y. Vaadia, F. C. Raney, R. M. Hagan	12:265-92
Photochemical Air Pollution Damage to Plants	J. T. Middleton	12:431-48
PATHOLOGICAL PHYSIOLOGY		
The Physiology of Plant Tumors	A. C. Braun	5:133-62
Physiological Aspects of Fungus Diseases of Plants	P. J. Allen	5:225-48
Pathogenesis in the Wilt Diseases	A. E. Dimond	6:329-50
Chemical Nature of Disease Resistance in Plants	J. C. Walker, M. A. Stahmann	6:351-66
Adaptation of Plant Pathogen to Host	J. J. Christensen, J. E. DeVay	6:367-92
Obligate Parasitism	C. E. Yarwood	7:115-42
Biological Relations of Plant Viruses	C. W. Bennett	7:143-70
Effects of Antibiotics on Plants	P. W. Brian	8:413-26
Physiology of Virus Diseases	F. C. Bawden	10:239-56
Plant Chemotherapy	A. E. Dimond, J. G. Horsfall	10:257-76
Pectic and Cellulolytic Enzymes in Plant Disease	R. K. S. Wood	11:299-322
Physiology of Wilt Disease	T. S. Sadasivan	12:449-68
Tumor Inception and Development in the Crown Gall Disease	A. C. Braun	13:533-58
Respiration of the Diseased Plant	A. Millerd, K. J. Scott	13:559-74
SPECIAL TOPICS		
Fluorescent Substances in Plants	R. H. Goodwin	4:283-304
Physiology of Mycorrhizal Relations in Plants	E. Melin	4:325-46
Tropisms and Nastic Movements	L. Brauner	5:163-82
The Role of Plant Physiology in Plant Geography	H. L. Mason, P. R. Stout	5:249-70
Physiology of the Cotton Plant	F. M. Eaton	6:299-328
Recent Advances in Plant Physiology in the U. S. S. R.	A. L. Kursanov	7:401-36
The Use of Aquatic Plants in the Study of Some Fundamental Problems	W. J. V. Osterhout	8:1-10
Stock and Scion Relations	W. S. Rogers, A. B. Beakbane	8:217-36
The Sugarcane Plant	G. O. Burr, C. E. Hartt, H. W. Brodie, T. Tanimoto, H. P. Kortschak, D. Takahashi, F. M. Ashton, R. E. Coleman	8:275-308
Physiological Ecology	W. D. Billings	8:375-92
Physiological Genetics	H. J. Teas	8:393-412
Physiology of the Tobacco Plant	R. A. Steinberg, T. C. Tso	9:151-74
Physiology of the Fresh-water Algae	R. W. Krauss	9:207-44
Plant Physiology and Horticulture	W. H. Chandler	10:1-12
The Pine Tree	N. T. Mirov, R. G. Stanley	10:223-38
Phototropism and Phototaxis	J. Reinert	10:441-58
Physics and Chemistry of Protoplasmic Streaming	N. Kamiya	11:323-40
Productivity of the Oceans	E. Steemann Nielsen	11:341-62